How to Begin and Sustain a Successful LHE Lean Program

Christopher Pirigyí – Manager of Auxiliary Financials
Institution: Miami University

Alfred Ryan – Director of Lean Initiatives
Institution: Miami University

10/6/2015  Time: 1:30 pm – 2:30 pm
Learning Objectives

• Understanding of What Lean Is and What Lean Is Not
• Identify the Importance & Need for Staff Support and Training
• How to Implement A Lean Project & Maintain A Lean Environment
EXPECTATIONS

• Specifics:
  • How to start a program? – Miami’s Experience
  • How to run the program and get involvement?
  • How do we structure the program? etc.
  • How do we sustain the Lean Program?
  • Mu- Lean Training Program
    • What classes were involved?
    • Were they taught in-house?
  • How do we compensate those in the program?
MU- Lean Implementation Plan

2009 – 2016 Implement Lean

1. Identify the Vision
2. Create a mission and define breakthrough objectives
3. Build an organizational structure
4. Develop training and certification
5. Build momentum in finance and business services
6. Position early adopters in early projects with impactful results
7. Expand to other areas of university and reach out to all employees
8. Expand internal training and certification
9. Create a sustainable culture of continuous improvement

Phases 1-6 completed from 2009-2012, and progress is ongoing in phases 7-9.
MU- Lean Divisional Evolution

2009-2015 Evolving Lean

- 2009
  • Finance and Business Services (FBS)- Housing, Dining, Recreation and Business Services
  • Also- Developed Steering Team Structure and MU- Lean Training

- 2010
  • Finance and Business Services (FBS)- Physical Facilities
  • Also- Developed Miami University unique MU- Lean tools (Steering Team and Process Improvement Team Workbooks)

- 2011
  • All of FBS- Finance, Budget, Human Resources, Police, Environmental Safety & Risk Management, Auditing, Procurement, and Treasury Services
  • Note: Other Divisions begin to become involved in inter-divisional cross functional projects
  • Also- Developed MU- Lean Certification Program and Senior Department Lean Leader Program
  • Also- Standardized NIIHKA site and processes to retain and evaluate projects

- 2012
  • Information Technology
  • President- Intercollegiate Athletics
  • Also- Developed new Template and Visio Tools to streamline the MU- Lean Value Stream process
MU- Lean Divisional Evolution

2009-2016 Evolving Lean

- 2013
  - Academic Affairs- College of Education, Farmer School of Business
  - University Advancement
  - Enrollment Management and Student Success
  - Also- Developed “I have a Lean Idea” Program
  - Also- Developed MU-Lean MyCard Database

- 2014
  - Academic Affairs- College of Arts & Science, Graduate School and Research
  - Regional Campuses- Middletown, Hamilton and VOALC

- 2015
  - All MU Divisions including Student Affairs involved in Lean
  - Also- Training Program is Self-Sufficient
  - Also- Developed Relationship and Grant Participation with LeanOhio

- 2016
  - New Employee on line ‘Lean Orientation’
  - New Training Facility
  - IACET (International Association for Continuing Education and Training) Certification scheduled to be Implemented
Lean Culture at Miami

• Major Objectives
  • Assist Miami University departments with creating a culture of continuous improvement
  • Introduce the Lean strategy and tools to operations and assist with project execution
  • Develop the internal capability for Miami to provide its own Lean training and development program
  • Develop leaders who can sustain a Lean culture at Miami
  • Become ‘self sufficient’
Lean Culture at **Miami**

- **Current State**
  - **Vision**
    - Ensure that the Miami Student Experience is the most positive and best in University life in America
    - Reduce and control expenses to meet University Goals without any adverse effect on the Miami Student’s experience
2020 Strategic Plan Goal

Ensure vitality and sustainability by building a forward-looking, efficient, and caring culture that stimulates, recognizes, and rewards creativity, entrepreneurial thinking, and exemplary performance.

How......**Lean Principles**
Lean Objectives at Miami

- **Job – One – Quality & Customer Service**
- **Vision**
- **Breakthrough Objectives**
  - Revenue
  - Productivity Improvement
  - Cost Reduction
  - Cost Avoidance
  - “Green” Initiatives
Miami Lean Enterprise Goals

1. Improve Quality & Customer Service
2. Identify New Revenue Opportunities
3. Define Demand for Services
4. Expand Demand Lead Time
5. Match Supply to Demand
6. Eliminate Waste
7. Reduce Supply Lead Times
8. Reduce Total Costs

Source: The Lean Enterprise – Memory Jogger Richard L. MacInnes - Net Results Inc.
Lessons Learned

- Three Most Important Principles for Success and Sustainment
  - Leadership & Support from the ‘Top’
  - Structure
  - Invest in your own people
What is Lean and where did it come from?

• W Edwards Deming ------- WWII
• TPS – Toyota Production System (Taiichi Ohno & Shigeo Shingo)
  – Henry Ford – 1910 Continuous Flow
  – Grocery Stores – Pull Systems
• Early American Adapters 1980 - GE, Wiremold, others – primarily Manufacturing
• America – 1990 – Defense Industry and Industrial Community adopts Lean Six Sigma, DFT (Demand Flow Technology), JIT (Just in Time), TPS (Toyota Production System)
• Becomes known as LEAN – 1990 – Machine That Changed the World & 1996 Lean Thinking ..... by James P. Womack
• Today – Lean Service and Lean Manufacturing can be found in Government, Industry, Healthcare and Education
What is Lean?

A Culture of Continuous Improvement and Urgency

Performing Lean activities is simply the relentless elimination of waste.

What is waste?

Womack & Jones in their book ‘Lean Thinking’ define it as: “any human activity which absorbs resources but creates no value.”

Waste can also be defined as any activity that does not add value to the customer.
Adding Value!

• Activities are defined as either:
  ➢ Value Added
    ➢ Customer is willing to pay for it!
    ➢ Improved Outcomes & Services for Internal & External Customers
    ➢ Positive Physical change to the process!
    ➢ First Time Right!!
  ➢ Non-Value Added
    ➢ Everything Else
Adding Value!

• MU-Lean Enterprise **Goals**
  • *Look for, Identify and Eliminate the 7 Types of Waste*
    • Transportation
    • Inventory
    • Motion
    • Waiting
    • Overproduction/Over Servicing/Extra Work
    • Over Processing
    • Defects

• **Bonus** - Lack of Employee Involvement and Creativity
Successful Lean Principles

• Base your management decisions on long-term philosophy, even at the expense of short-term financial goals
• Create continuous process flow to bring problems to the surface
• Use a “pull” system to avoid over production
• Level out the workload
• Build a culture of stopping to fix problems, to get quality right the first time
• Standardize tasks- this is the foundation for continuous improvement and employee empowerment
• Use visual controls so problems are not hidden

Source - Jeffrey Liker – The Toyota Way
Successful Lean Principles

• Use only reliable, thoroughly tested technology that serves your people and processes
• Grow leaders who thoroughly understand the work, live the philosophy, and teach it to others
• Develop exceptional people and teams who follow the organization’s philosophy
• Respect your extended network of partners and suppliers by challenging them and helping them improve
• Go see for yourself to thoroughly understand the situation
• Make decisions slowly by consensus, thoroughly considering all options; implement decisions rapidly
• Become a learning organization through relentless reflection and continuous improvement

Source - Jeffrey Liker – The Toyota Way
Miami University Lean Structure

- Lean Goals
- Lean Leadership
- Lean Teams
- Lean Champion
- Lean Tools
Lean Organizational Structure

Executive Steering Team

Lean Champion

Divisional Steering Teams

- Process Improvement Teams
  - Resource & Steering Members

All University Employees
Steering Team Guidebook

a. Miami University Lean Structure
b. MU Lean Project Identification Process
c. MU Lean Standard Project Cycle
d. Leadership and Structure Details
e. MU Lean Steering Team Responsibilities and Expectations
f. Executive Update Tracking Form
g. Executive Summary/Close Out Form
Leadership and Structure Details

Key Definitions

➢ Lean
  A methodology with proven processes and tools to continuously identify and eliminate non-value added waste throughout an organization while providing value to the customer.

➢ Team
  A group of people with winning attitudes and skill sets working in harmony toward a common goal.

➢ LeanService Teams
  High performance teams coached, trained, supported and empowered to create efficient processes within a continuous improvement-driven and senior management-led culture. The concept of LeanService Teams is not complex; 20% is physical and the other 80% is harnessing the human element.
Leadership and Structure Details

Critical Requirements for Success

- **Led from the TOP**
  Senior management team must be convinced that this process is critical for the team to be successful.

- **Employee “buy in”**
  The buy in of every employee is essential to the success and ultimate sustainment of the MU-Lean enterprise.

- **“Best of the Best” Structure and Participation**
  The selection of the right team members and the creation of a MU-Lean office with a Lean manager/champion reporting to the senior management are essential steps to building a successful MU-Lean program.

**Employee Development**
- The team building aspect must be maximized and have as much, if not more, training effort as the training on Lean tools and techniques.
MU- Lean Structure

**Executive Steering Team**
- CEO & Senior Staff + LEAN Champion
- Provides overall direction
- Identify target Lean processes
- Approve team goals and metrics
- Assures sustained results

**LEAN Champion Leader / Resident Expert**
- Learns LEAN methodology
- Coordinates MU-Lean Project initiatives
- Trainer, Facilitator, Coach
- Maintains program metrics
- Maintains Standards
- Oversees Lean Leader Certification Program
- Executive Steering Team Member

**Resource /Steering Team Member (RST)**
- Process owner + key customer + stakeholder + expert
- Provide direction / resource / support to PIT
- Help & Support MU-Lean PIT members
- Engage with MU-Lean PIT during event as required
- Approve process redesigns if applicable
- Support PIT in implementing new process

**Process Improvement Team (PIT)**
- **PIT Team Leader**
- Cross functional, multi-layered
- Scribe
- Walk process and collect real-time data
- Redesign process
- Develop action plans
- Create Standard Work
- Write procedures and develop metrics
- Implement process changes

**Department Steering Team**
In addition to the Executive Steering Team at the Division Level, the larger Departments will also have Department Steering Teams per approval of Executive Steering Team and CEO. Assists PIT as Steering Member of PIT Team.

The MU-Lean Teams must have a dedicated area to meet and work on MU-Lean Projects.
MU Lean Project Identification Process

A) Staff member suggests potential project

1. Idea Evaluated by Manager to determine if it qualifies to go to Steering team

2. Potential Improvement Idea Shared with Steering team

3. Steering Team evaluates

   - If project is determined to be high priority, it is approved for launch
   - If project is determined to be lower on priority list, it may go into a queue to await resources for launch at later time

4. Steering Team and Team Leader Select Process Improvement Team

5. Standard MU Lean Project cycle begins
Standard Lean Project Cycle

6-12 Team Members - Leader, Scribe, Process Owners, Fresh Eyes, Steering, Resource

Opportunity Identified → Process Improvement Team organized → Team trained in Lean Service Tools → Project deliverables determined

Team meets regularly and Leader assigns tasks → Observe processes and collect data to define current state → Evaluate current state using standard Lean Service Tools → Brainstorm solutions; Design future state

Further analysis of project → Final approval of recommendations → Future State Implemented
Process Improvement Team (PIT) Guidebook

a. Identify the Project
b. Identify the Deliverables
c. Identify Each Team Member’s Area of Expertise
d. Identify Training Requirements for the Team
e. Identify Other Resource Requirements and Tools for the Team
f. Schedule and Plan Your Activities and Meetings
g. Identify Current State of Lean Project
h. Create a Future State and Implementation Plan
i. Succeed and Sustain
The MU-Lean PIT Process

• Complete First Phase
  • Approvals, goals, deliverables, teams, training and resource are all in place and ready to begin project
• Next - Determine Type of Team Engagements
  • MU-Lean Kaizen Event - Total Emersion
  • MU-Lean Scheduled Team Meetings with one to two weeks in between and lasting 1-2 hours
  • MU-Lean Hybrid – Longer Meetings spaced in shorter intervals
Kaizen Event

• A Kaizen is an intensive project where:
  • Employees are dedicated 100% to project during event
  • Project is well defined going in
  • Base Data gathered by Team Leader
  • Boundaries & Scope well defined ahead of time
  • Implementation is immediate
    • During same week – if possible
    • Complete rest in 20 days or less
  • Management provides support
    • Material & Location support (Flip Charts, Lean Room, etc.)
    • Steering
    • Information Technology
    • Human Resources
    • Etc.
The MU-Lean PIT Process

- Complete Second Phase
  - Collect key data
  - Focus on Current state
  - Identify Key Processes in the Value Stream that you are trying to improve
  - Use the MU-Lean Template and Process tool to collect data and steps
- Identify all Value & Non Value Activities
- Identify Waste
- Use Lean Tools – DMAIC, SWOT Analysis, Statistic Analysis etc.
MU- Lean Tools

“A” Acceptance Tools
“T” Technical Tools
Acceptance Tools

“A” tools are designed to help individuals accept the changes. Because Lean projects take individuals involved into consideration, this tends to be an easier process than the “do as I say”, not-so-effective management style.

“A” tools could include training and the application of interpersonal skills, facilitation skills, negotiation, consensus, emotional intelligence and much more.
Human Tools for Building MU-Lean Acceptance

**Team Development**
- Culture Assessment
- Myers-Briggs
- PATA
- Johari Window
- Ladder of Inference
- Situational Leadership
- Dialogue Model
- Left Hand Column
- Team Interaction/Interpersonal Skills Training
  - Dealing with Difficult People
  - Listening
  - Communication
  - Empowerment
  - Conflict Resolution
  - Meeting Management
  - Problem Solving
  - Productivity and Time Management
  - Team Evaluation

**Self Examination & Discovery Tools**

**Organization Development**
- tools to help people accept change!!

**A-Tools**

**80% Factor**

**Accepting Change**
Technical Tools for Building MU-Lean

1. MU-Lean Workbooks & Lean Leader Certification
2. MU-Lean-SBPI (Business Process Improvement)
3. Enterprise Mapping
4. Value Stream Mapping
5. Flow Charts
6. Spaghetti Charts
7. PcQ Analysis
8. Process Route
9. SWOT Analysis
10. 6-S
11. Strategy Deployment - Hoshin Kanri
12. Standard Work
13. Visual Tools
14. Benchmarks
15. MS – Visio, MS - Project, MS - Office
MU-Lean Tools
Excel/Visio
MU-Lean Tools

• Excel spreadsheet template used to map out current state and record iterations and waste
• Visio used to create process flow charts and value stream mapping (linked to Excel for one-stop-shop updating)
• DMAIC Problem Solving Approach
MU-Lean Tools- Excel/Visio

- Excel is used to document information that a lean team gathers during a project, including the:
  - current state
  - future state
  - implementation plan
  - systems utilized
  - project metrics
MU-Lean Tools- Excel/Visio

- Visio is used to create flow charts of the current and future states
- Standard template links the flow chart to an Excel document
- Displays key step attributes
<table>
<thead>
<tr>
<th>Step</th>
<th>Step Description</th>
<th>Value Added</th>
<th>Non Value Added</th>
<th>Total Time</th>
<th>Delayed Time</th>
<th>Wait Time</th>
<th>Error Time</th>
<th>Total Time</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
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<td></td>
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</tbody>
</table>

MU-Lean Tools- Excel/Visio
Cost Avoidance Detail:
College of Education Health and Society (EHS)
Change of Program (COP)

<table>
<thead>
<tr>
<th>Step Description</th>
<th>Value Added</th>
<th>Worked Value Added</th>
<th>Time per Iteration</th>
<th>Year1 Iterations</th>
<th>Year2 Iterations</th>
<th>Total Work Time Year1</th>
<th>Total Work Time Year2</th>
<th>Work Time in Days</th>
<th>Work Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Suspect (Potential Student) Identified</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>2. Student fills out change of program “yellow” form . EDP Support Staff interactions with student regarding the form</td>
<td>0</td>
<td>0</td>
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<tr>
<td>3. Support staff enters form information into EDP PDF and forwards email to EHS Admin</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>4. Student meets with advisor</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Advisor fills out change of program “yellow” form online for major. Form information entered into departmental database by E2T</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>6. Support Staff</td>
<td>0</td>
<td>5</td>
<td>0</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>7. Student meets with advisor</td>
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<td>8. Support staff</td>
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<tr>
<td>9. EHS Admin Office performs Divisional Review for completeness</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>10. Office/Registrar sends confirmation email to student</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
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</tr>
<tr>
<td>11. Communication Office/Registrar checks Data which is verified against</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>12. Communication Office/Registrar enters data into Banner</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>13. After day-end, Communication Office/Registrar check the degree report for corrected data</td>
<td>0</td>
<td>5</td>
<td>0</td>
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<td>0</td>
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</tbody>
</table>

Total: $36,844.00
Flow Chart Attributes

Measurements for each step. Use as necessary/when possible.

**Name of Step**
- Duration
- Value Added Time
- Non-Value Added Time
- Wait Time
- Distance traveled
- Touches
- Labor
Seeing Waste in the EHS COP
Current State Workflow
The MU-Lean PIT Process

- Complete Third Phase
  - Identify areas of improvement
  - Complete a gap analysis between where you are and where you want to be in the future state
  - List all changes and future state requirements using the MU-Lean Template
- Create Standard Work
- Identify and Publish ‘Key Metrics’
- Create an Implementation Plan
EHS COP
Future State Workflow

Change of Program: College of Education, Health and Society (Future State) Page-1

1. General Student Record Created in Banner after student is accepted
2. Student Signs up for Orientation
3. Attend Orientation: June, August & January. Advisor can make changes in the COP System
4. Student starts attending Miami University
5. Student decides on program change?
6. Student fills out change of program online form

D7. Required Advisor interaction? NO
11. Approval, Banner Updated
12. Notify Student, New Advisor, Arrival, and Leading Departments

D9. Advisor/Portfolio approved? NO
10. Denial with standard reasons
8. Interact with Advisor
Lean & Agile:
Complimentary approaches

MIAMI UNIVERSITY
Agile and Lean Principles

Humanistic values: Trust, Accountability, Honesty, Courage

Principles: Customer first, collaboration, speed, flexibility, simplicity, teamwork

Lean for operations
- Specify value
- Eliminate waste
- Create flow
- Don’t overburden
- Perfect

Continuous Improvement
- No problem is a problem
- Go see the real thing
- Learn by doing

Agile for projects
- Focus on business value
- Iterative development
- Small releases
- Sustainable pace
- Retrospectives

Feedback

MIA MI UNIVERSITY
How Lean and Agile Work Together

1. Future State = Requirements
2. Requirements become User Stories
3. Users Stories become the Backlog of Work

MU Lean Process

IT Agile Process to develop solution
Standard Work

• Standard work is a critical component of any LEAN/continuous improvement process
  • Before any process can be improved, it must be stabilized
  • Only then can waste be identified and new standard work be implemented
  • Variation in process creates opportunities for quality problems
  • A LEAN process with waste removed allows for quality to be built into the process
Curriculum, Lean Tools and Certification Program

a. Senior Lean Leader Certification
b. Current Certified Senior Lean Leaders
c. Certified Senior Lean Leader Continuing Education Requirements
d. Senior Department Lean Leaders 2015
e. Lean Certification Candidates 2015
f. MU- Senior Lean Leader Certification & Development Program Fall 2015
g. Calendar of Events for Spring 2015
h. Curriculum
   I. “A” Tools
   II. “T” Tools
Lean Training & Certification
MU-Senior Lean Leader Certification & Development Program 2015

• Purpose: Provide staff with the knowledge to create a sustainable lean environment.

• Senior Lean Leaders are provided with a solid foundation of lean principles and the tools necessary to enable them to share lean methodologies and expertise as Miami's lean culture continues to grow.

• A program dedicated to investing in University staff’s continuing development.
MU-Senior Lean Leader Certification & Development Program 2015

• In order to become fully certified the Lean Leaders must successfully complete the following requirements:

• Technical Tools required internal courses:
  • Lean Two Day Training - facilitated by Miami University Staff Development
  • Lean Excel Template Conversion to Visio - facilitated by Miami University Staff Development
  • Lean Metrics - facilitated by Miami University Staff Development
  • Agile - facilitated by Dr. Doug Troy, Director of the Agile Academy and CEC Graduate Programs, Miami University
  • Lean Quality Management - facilitated by Rod Baker, Farmer School of Business visiting faculty, Quality Manager, ZF Batavia LLC
  • Employing the DMAIC Process - facilitated by Chris McGill, Six Sigma Master Black Belt, Cintas Corporation
  • Introduction to Project Management - facilitated by Denny Evans, Lean Certification and Six Sigma Program trainer, Xavier University
MU-Senior Lean Leader Certification & Development Program 2015

- In order to become fully certified the Lean Leaders must successfully complete the following requirements:
- Acceptance Tools required internal courses:
  - MBTI Myers-Briggs Introduction to Type - facilitated by Miami University Staff Development
  - Conflict Management - facilitated by Miami University Staff Development
  - Change Management - facilitated by Miami University Staff Development
  - Micro-Inequities - facilitated by Miami University Staff Development
  - Strengths Based Leadership - facilitated by Dr. Megan Gerhardt, Naus Family Faculty Scholar and Associate Professor of Management, Miami University

- Additional required external course:
  - Cultural Changes Through Leadership, Employee Development & Engagement - facilitated by Michael Hoseus, Executive Director of the Center for Quality People and Organizations, a Toyota-supported nonprofit organization
In order to become fully certified the Lean Leaders must successfully complete the following requirements:

Plus additional hours to equal a total of 100 minimum hours from the following electives:

- Building a Reputation of Integrity - facilitated by Miami University Staff Development
- Building and Maintaining Your Team - facilitated by Miami University Staff Development
- Communication’s Role in Management - facilitated by Miami University Staff Development
- How to Conduct Efficient and Effective Meetings - facilitated by Miami University Staff Development
- Train the Trainer for Lean Leaders - facilitated by Miami University Staff Development
- Presentation Skills - facilitated by Miami University Staff Development
- Lean Standard Work - facilitated by Miami University Staff Development
- Approved American Management Association courses
- Participation in approved seminars and conferences relating to Lean, Six Sigma, Agile and Project Management

Successfully participate in 5 process improvement projects, and serve as a leader for at least 3 of them (must lead at least 1 team or be a member of 2 teams per year while in the certification program)

Present a completed project to a Review Board

Submit summaries of selected courses

Other requirements per senior management
Lean Leaders

- Lean Leaders
- Senior Lean Leaders
- Department Lean Leaders
- Divisional Lean Leaders
- Lean Champion
Senior Department Lean Leaders 2015

Back Row (left to right): Al Ryan-Director of Lean Initiatives, Jeremy Davis and Jeff Pidcock
Front Row (left to right): Lori Minges, Kriss Cassano, Cindy Lewis, Anne Wheeler, Chris Pirigy and Dana Miller
Not Pictured: Ruth Groom, Emily Berry and Ted Peters
MU-Lean Initiatives Team

Lean Administration:
• Al Ryan, Director of Lean Initiatives, ryanaw@miamioh.edu, 529-4225
• Rosanne Gulley, Lean Initiatives Administration, gulleycr@miamioh.edu, 529-4226
• Carley Collins, Lean Initiatives Administration, kearnscc@miamioh.edu, 529-4225

Senior Department Lean Leaders:
• Jeremy Davis, Physical Facilities Department, davisjd@miamioh.edu, 529-7018
• Jeff Pidcock, Finance, Internal Audit, Treasury and Budget, pidcocjn@miamioh.edu, 529-4227
• Lori Minges, MUPD and ESRM, mingesla@miamioh.edu, 529-1936
• Kriss Cassano, Enrollment Management and Student Success, cassankl@miamioh.edu, 529-8579
• Cindy Lewis, Training, lewisci@miamioh.edu, 529-0432
• Anne Wheeler, Human Resources, wheelean@miamioh.edu, 529-1791
• Chris Pirigyi, Housing, Dining, Recreation and Business Services, pirigycm@miamioh.edu, 529-0648
• Dana Miller, Information Technology Services, mille704@miamioh.edu, 529-2573
• Ruth Groom, College of Arts and Science, groomra@miamioh.edu, 529-2575
• Emily Berry, University Advancement, berryee@miamioh.edu, 529-9625
• Ted Peters, College of Arts and Science, petersts@miamioh.edu, 529-3031
Communication

Monthly Newsletter
Departmental Meetings
Lean Introduction Sessions
New Staff Orientation
Lean Website
Niihka Site

Why & How it is used!

Secure Site for Lean Project Data Storage
- Historical Data for Lean Projects
- Workbooks Maps/Diagrams
- Excel Documents
- Visio Flowcharts
- Meeting Notes
- Agendas

Establishment of Work Site is a Key Step in Project Setup Process

Means to Communicate Easily with all Team members & Lean Initiatives Office

Lean Office Worksites
- Miami LEAN
- Lean Certification
- Senior Department Lean Leader
Lean Project Reports

Summary of Lean Project Results Through June 2015

Number of Projects Completed 620
Number of Current Projects 178
Number of Ideas Currently in Process 113
Number of Employees Who Have Submitted a Lean Idea 223

Lean Project Results

- Reduction in Costs
- Improvement in Quality
- Improvement in Responsiveness to Customers
- Increased Sales to Customers
- Reduced Labor Through Elimination of Wasted Time
- Continuous Improvement Journey Expansion

How can I get involved in Lean?

Suggestions for new Lean projects are welcomed and encouraged. The process for submitting a Lean idea has been greatly improved and you may now submit your ideas for projects electronically on the "I Have a Lean Idea" form located here.
Lean Database & Lean Idea Program

• Deliverables
  • Suggestion Program- ‘I Have a Lean Idea’
  • MU-Lean Electronic Workbook
  • Supports MU-Lean Certification Program
    • Tracks all education and training activities
    • Tracks all project and project participation
    • Status of Certification Candidates
  • Project Tracking and Status- Real Time
  • Generates Reports and Dashboards for all Lean Activities
MU-Lean Suggestion Program

I have a Lean Idea

Program Overview
Suggestion Form
Team Leader Instructions
Lean Idea Workflow
Lean Idea Reporting
Streamline Point Request Submission for Job Enrichment (Skillport Courses)

(100001184)

was last updated on Wed Jun 10, 2015 at 09:39am by Anne Wheeler (WHEELEAN)

As a Lean Manager, you can inactivate this project

Idea Submitted by Michael Savnik (SAVNJKMJ)

Lean Status

Project Name
Streamline Point Request Submission for Job Enrichment

Idea Status (currently set at: Forwarded to Idea Subject Matter Expert)

 Returned to Senior Department Lean Leader

You can still change the Idea Department
Lean Finance and Business Services - HDRBS

This will accomplish the following LEAN Initiatives

- Productivity
- Cost Reduction

The way it is now

The "Job Enrichment Course Approval/Point Form" must be printed, completed, signed by the employee and their supervisor, and submitted via email or campus mail for each Skillport course used for Job Enrichment (cannot use one form for multiple courses).

The way it should be

Allow for "batching" submissions of multiple [completed] Skillport courses since so supplemental documentation is needed or required. Ideal Option: Create an on-line form within MyCard that can link course title, code, hours (points), supervisor, and date completed to the Staff Development list kept in MyCard for each employee. Secondary (less ideal) Option: Create a dynamic PDF form where employees can type in all needed information and potentially copy/paste when doing multiple forms versus having to write everything every time.

Where the idea came from

Printing, completing, and signing several individual forms and requesting a supervisor signature for each one.

Advantages of the idea

1) Save resources (paper and ink) and reduces waste of paper
2) Save time (employee and supervisor)
3) Increase productivity of Staff Development in processing/approving requests
4) Creates a more seamless and easy-to-follow flow for employees and Staff Development
5) Reduces redundancy of recording course information
6) Reduced wait time for processing (i.e., forms would no longer have to travel via campus mail)
7) Reduces error (i.e., form is illegible and/or manual entry from form into MyCard)
Features of the Lean Idea Database

• The submitter will receive periodic emails updating the status of the project. This will include responses from the Subject Matter Expert (SME)/Team leader and other comments.
• If the SME/Team Leader has not reviewed the idea and changed the status to “returned to senior department lean leader” within 25 days the system will begin to generate daily emails.
• All parties will be able to log in to view the status of the project.
Lean Idea Workflow System

• Idea submitted to Lean Initiatives Office
• Reviewed and forwarded to Senior Department Lean Leader
• Reviewed and forwarded to a Subject Matter Expert to more clearly define the idea as a potential project
• Returned to Senior Department Lean Leader and evaluated for benefit to Division/Department
• Forwarded to Steering Team for Approval, Denial, or Placement in the Parking Lot
Database Reporting

- Project Status Report
- Dashboard total by division/department
- Lean ideas submitted by division/department and by staff member
- Project involvement by staff member
- Information for Board of Trustees Report
- Information for Incremental Report
Lean Process Results

- Miami University
  - MU-Lean Results – FY2008-FY2015
    - Reduction in Costs
    - Improvement in Quality
    - Improvement in Responsiveness to Customers
    - Increased Sales to Customers
    - Reduced Labor through Elimination of Wasted Time
    - Continuous Improvement Journey - Expanded
## Lean MyCard Database Dashboard for Lean Managers

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost Avoidance</th>
<th>Cost Reduction</th>
<th>Revenue</th>
<th>Productivity</th>
<th>Green</th>
<th>Total Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideas Forwarded to Idea Subject Matter Expert</td>
<td>15</td>
<td>12</td>
<td>4</td>
<td>15</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>Ideas Forwarded to Steering Team</td>
<td>14</td>
<td>8</td>
<td>3</td>
<td>20</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>Ideas Forwarded to Senior Department Lean Leader</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Ideas Returned to Senior Department Lean Leader</td>
<td>14</td>
<td>9</td>
<td>5</td>
<td>18</td>
<td>7</td>
<td>29</td>
</tr>
<tr>
<td>Denied Ideas</td>
<td>99</td>
<td>40</td>
<td>37</td>
<td>125</td>
<td>72</td>
<td>234</td>
</tr>
<tr>
<td>Future (Parking Lot)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>Just Do It</td>
<td>$2,536,441</td>
<td>$1,308,647</td>
<td>$269,662</td>
<td>29</td>
<td>84</td>
<td>238</td>
</tr>
<tr>
<td>Complete (White)</td>
<td>$16,980,770</td>
<td>$6,560,756</td>
<td>$4,899,651</td>
<td>94</td>
<td>175</td>
<td>401</td>
</tr>
<tr>
<td>Open (includes Approved, On Target (Green), Starting to get Off Schedule (Yellow), &amp; Needs Discussion (Red))</td>
<td>$571,420</td>
<td>$439,570</td>
<td>$41,945</td>
<td>8</td>
<td>50</td>
<td>186</td>
</tr>
<tr>
<td>On Target (Green)</td>
<td>$555,691</td>
<td>$407,540</td>
<td>$22,615</td>
<td>8</td>
<td>46</td>
<td>158</td>
</tr>
<tr>
<td>Starting to get Off Schedule (Yellow)</td>
<td>$15,729</td>
<td>$32,030</td>
<td>$19,330</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Needs Discussion (Red)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>
• **Over 2000** – employees trained on Lean
• **120** - Lean Leaders in the Certification Program - Each must complete a series of courses (minimum 100 hours), Participate in 5 Projects, Lead Three Projects, Pass an Exam, Present a Significant Lean Project, Continuous Education Requirements upon Certification
• **24-30** - Months to Complete
• **36** - Certified Senior Lean Leaders 8/13/15
• **20** – New - Lean Certification Candidates per semester
• **100%** - Lean Introduction to Miami Employees – 2020 Goal
• **800+** Suggestions from the ‘I Have a Lean Idea’ Program
LeanOhio

Bootcamp

&

Support to State Agencies
Miami University’s LeanOhio Boot Camp is an intensive **week-long** training that gets people learning and using Lean methods and tools.

Miami University’s LeanOhio boot camp is tailored to the public-sector workplace and public-sector processes. This is practical training aimed at generating results. Participants will be able to use their new knowledge and skills immediately -- to make government simpler, faster, better, and less costly.

**Lean Boot Camp in brief**

- **Day 1:** Mission Critical
  - Lean Overview
  - Scoping a Project/Process

- **Day 2:** Making the Invisible Visible
  - Process Mapping

- **Day 3:** Analyzing the Problem
  - Root Cause

- **Day 4:** Achieving Transformation
  - Process Redesign

- **Day 5:** Leveraging Results
  - Publishing and Sustaining Results

**Participants will receive:**
- LeanOhio Boot Camp manual
- Lean Tool Kit
- Certificate of Participation
- Access to the LeanOhio Network

**Class Information:**

- **Location:** Staff Development Center
  - 426 Wells Mill Dr., Oxford, OH 45056

- **Time:** October 5-9, 2015
  - Mon 9:30 am-4:30 pm
  - Tues – Fri 8:30 am - 4:30 pm

**Register in 2 Easy Steps:** *(Deadline is 9/21/2015)*

2. Click: on October 5-9, 2015 and fill out the required form.

For more information, contact Becky Dysart, Director of Staff Development

lean@miamioh.edu or (513) 529-8078

LeanOhio: Making state government in Ohio simpler, faster, better, and less costly.
RESULTS

• Miami University uses Lean to achieve its vision of providing the best student experience.

• Lean Initiatives has improved quality, responsiveness, productivity, sustainability, revenue, and cost reduction throughout the university.

• The Lean process analyzes the work and finds ways to continuously improve.

• Recently ranked the most efficient national university in producing high quality results, Miami has reduced or avoided costs and enhanced revenues for an annual financial gain of $32 million via Lean processes.
Departmental Project Presentations
Physical Facilities
PFD Planning and Scheduling

- Began with the desire to control the cost of campus operations and to provide a more consistent service
- Maintenance expenses averaged $0.60/GSF in 2011
PFD Planning and Scheduling

• An impartial evaluation was performed on the operation to learn the true current state
• Open forums with customers were conducted to solicit input for a desired service model
• Goals were set based on information gathered and industry best practices
PFD Planning and Scheduling

• The implemented future state – today’s current state
  • Over 20% of today’s maintenance work is preventive or proactive in nature versus 4% in 2011
PFD Planning and Scheduling

• Sustained operational improvements

• Maintenance expenses average $0.45/GSF in 2014 versus $0.60/GDF in 2011
PFD Planning and Scheduling

- Re-evaluation of operation and continuous improvement
- Lessons learned
  - The resources needed for this process improvement were already available, they just needed to be aligned
Housing, Dining, Recreation and Business Services
Lean Educational Fair

• 2014 HDRBS Lean Fair
• 2015 University Wide Lean Fair
  – Miami’s approach to continuous improvement, Lean concepts, and Lean tools
  – Nearly 700 participants
  • Multi-Divisional
    – HDRBS, PFD, HR, Payroll, Advancement, Academics, Enrollment Management and more represented
Lean Educational Fair

- Lean Fair Experience
  - Employees were able to take away valuable ideas and practices to use in their daily work lives.
- Three hour session with activities
  - Such as understanding how Lean has helped to decrease on the job injuries while reducing workers compensation claims.
  - The DIY classroom explained how working together such as depositing individual desk trash cans into a centralized location can save the university time and money.
  - Office of Sustainability featured the “green your ride” push button survey. Here individuals were able to partake in offering feedback to reducing Miami’s carbon footprint while they were able to gain a clearer perspective on how much of their pay is being spent on work travel.
Enrollment Services and Student Success
One Stop for Student Success Services
What is the One Stop?

- Consolidated front-facing services of the Bursar, Student Financial Assistance, and University Registrar offices

- Answer questions and resolve issues for current and future Miami students, families, alumni, faculty, staff, and the broader University community in the areas of billing and payment, financial aid, registration, and student records

- Provide best in class, student-centric services via telephone, email, online and in-person
How will the One Stop change Miami?

• Improve service capabilities to positively impact student satisfaction, increase retention, lower the cost of delivery, and over time, become one of many selling points in the recruitment of new students

• Eliminate “bouncing” of students from office to office

• Adopt a “total care” approach for every customer interaction to resolve all current issues and to prevent future issues

• Utilize customer interaction data to find trends and implement proactive outreach

• Implement changes to enhance the customer experience through technology and improved processes
How did we make the One Stop a reality?

• Team effort among offices within Division of Enrollment Management and Student Success, as well as IT Services, Physical Facilities, University Communications & Marketing, Regional Campuses, Telecommunications, and many, many others throughout campus

• Benchmarking and site visits; learning from other's successes as well as problems they encountered

• Extensive planning, training, documentation, analyzing (and re-analyzing) potential issues and solutions
What were our deliverables?

• Physical space for call center, staff offices/cubicles, counter services, counseling rooms, and lobby desk/waiting area

• Call center for 30,000+ calls/year

• Ticketing system to process in and out bound emails, track interactions and provide data/reporting

• Lobby check-in and queuing system

• Website combining Bursar, Registrar, and Student Financial Assistance content, but also offering a login feature for students to view their information
After Renovations
One Stop Reporting

As of 7/8/15

One Stop Total Resolved by Reason

<table>
<thead>
<tr>
<th>Custom field Reason</th>
<th>Ticket count</th>
</tr>
</thead>
<tbody>
<tr>
<td>(no value)</td>
<td>490</td>
</tr>
<tr>
<td>Academic Records</td>
<td>1381</td>
</tr>
<tr>
<td>Authorizing Users</td>
<td>28</td>
</tr>
<tr>
<td>Bill or Payment</td>
<td>9048</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>12892</td>
</tr>
<tr>
<td>Graduation</td>
<td>739</td>
</tr>
<tr>
<td>Other</td>
<td>2107</td>
</tr>
<tr>
<td>Other Money Matters</td>
<td>876</td>
</tr>
<tr>
<td>Re-enrollment</td>
<td>377</td>
</tr>
<tr>
<td>Referrals</td>
<td>1389</td>
</tr>
<tr>
<td>Registration</td>
<td>4756</td>
</tr>
<tr>
<td>Relocation</td>
<td>57</td>
</tr>
<tr>
<td>Transcripts</td>
<td>2507</td>
</tr>
<tr>
<td>Tuition and Fees</td>
<td>476</td>
</tr>
<tr>
<td>Veterans</td>
<td>121</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>182</td>
</tr>
<tr>
<td>Total</td>
<td>37426</td>
</tr>
</tbody>
</table>
One Stop Lobby Check-In

Please select your primary reason for visiting the One Stop:

- My Scholarships & Financial Aid
- My Bill & Payment
- I need to drop off a payment.
- My Classes & Course Registration
- My Graduation
- Re-enrollment
- I need to request an immediate transcript.
- I need to order a transcript to pick up later.
- I need to pick up a transcript that I previously ordered.
- I need to waive health insurance.
- Parking
- Other

Please visit the lobby desk if you need assistance checking in.
Previous Websites
One Stop Website

DON'T STRESS OVER COURSE SELECTION, FOLLOW THESE

Registration Tips »

-MAKE A PAYMENT-
-ORDER A TRANSCRIPT-
-FIND FORMS-
-DATES AND DEADLINES-
Tuition amounts for 2015-2016 will be available in early July.
Billing and Payment Dates: The Fall semester bill will be available July 15, 2015 and will be due August 6, 2015.
Classified Staff Involvement
Completed MU-Lean Projects
Led by Classified Staff

- **Email Invoicing- Phase 1 of OCR/Electronic Invoicing**
  - Liz Hurrell- Finance
    - 10% Productivity, $1625 Cost Reduction, Green

- **Prescription Drug Drop Off Box**
  - Marjorie Foust- MUPD
    - 47% Productivity, $1308 Cost Avoidance, Green

- **Train for PM on building generators**
  - Jeff Liming- PFD
    - $1200 per year Cost Avoidance

- **Asbestos Training for 2nd shift electricians**
  - Dave Merriman
    - $5000 per year Cost Avoidance

- **Contractor Warranty Work**
  - Dustin Hill- PFD
    - $15,000 per year Cost Avoidance

- **Paint Pre-Painting**
  - Larry Head- PFD
    - $9000 Cost Avoidance
Lean Ideas Submitted by Classified Staff

- **Electronic Elevator Inspection Form**
  - Jason Marcum (PFD)
- **Access to WRA Cabin and Western Lodge Calendars**
  - Toni Schwab (PFD)
- **Tracking Work Projects in Buildings**
  - Dustin Jones (HDRBS)
- **Reduction of Ice Usage During Learn to Skate**
  - Cassandra MacDonald (HDRBS)
- **Freestyle Ice Time**
  - Kyleigh Gaff (HDRBS)
- **Streamline Point Request Submission for Job Enrichment**
  - Michael Savnik (HDRBS)
Questions?
The Path Forward

How can Miami collaborate and assist your institution to develop a successful and sustaining Lean Program?