

Improving and Sustaining Libraries using the Lean Philosophy

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Introductions

- Laurie Stark, Staff Development and Lean Initiatives Coordinator
- Annelise Doll, Scholarly Communications and Repositories Librarian
- Lean Facilitators at Michigan Tech & lean practitioners for 3 years+

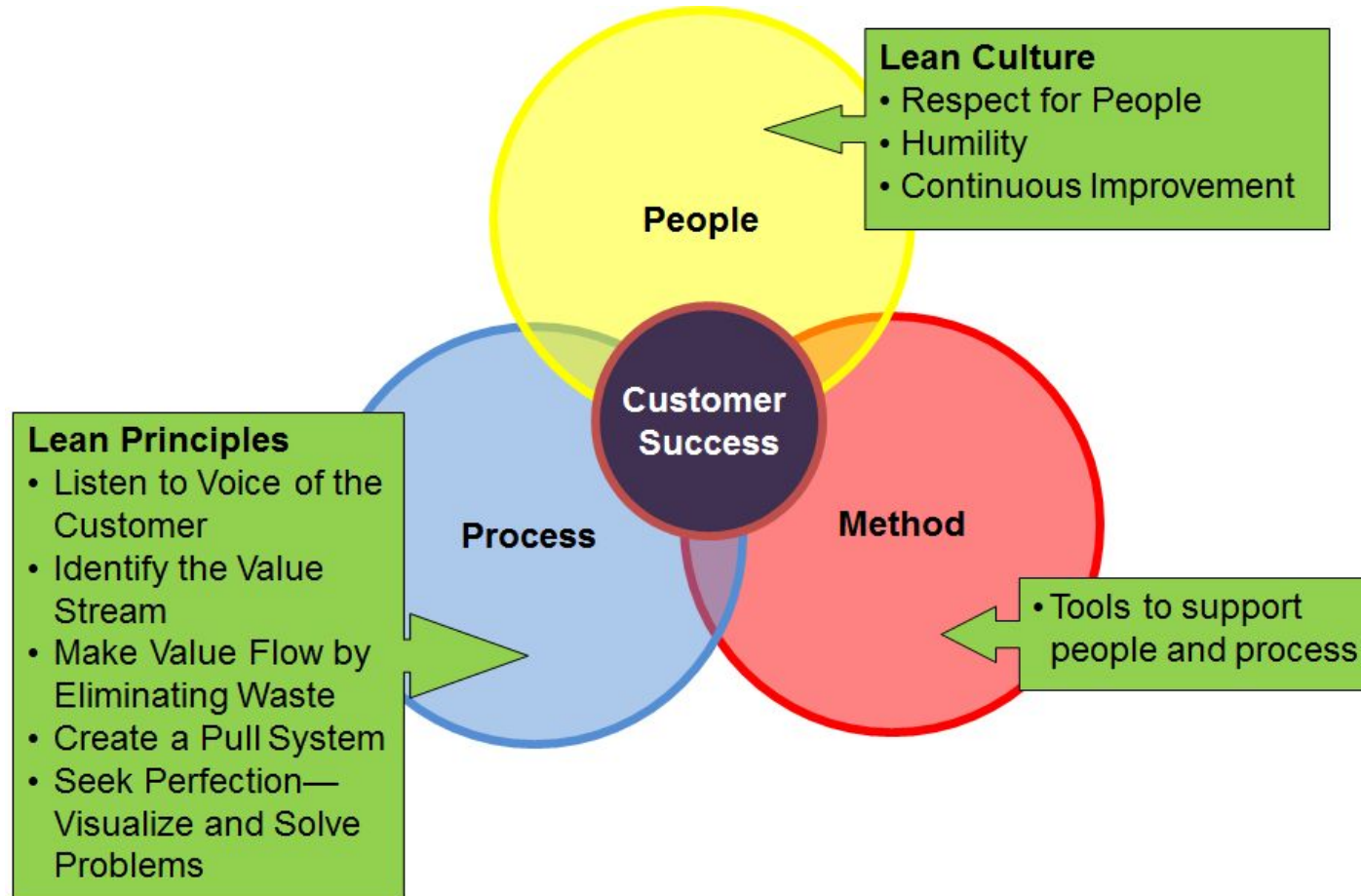
Roadmap

- What is Lean?
- 3 Lean improvement projects
 - Workshop
 - Kaizen
 - Just Do It
- How can I get involved in Lean?

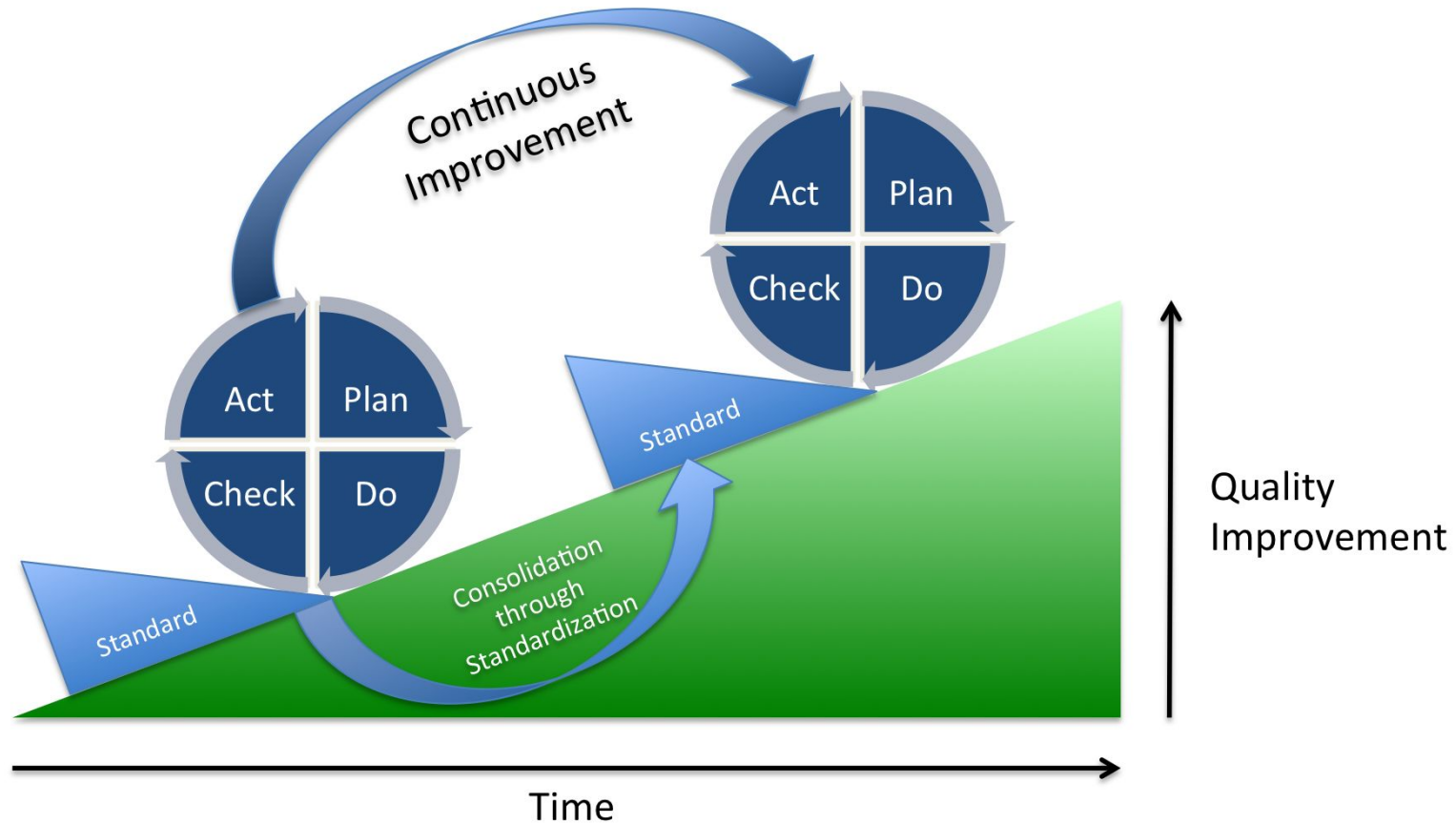
What is Lean?

- Lean is a dynamic process of continuous improvement and learning by empowered associates, in a culture of mutual trust and respect, focused on eliminating waste and maximizing value for our customers. - Michigan Lean Consortium
- Lean creates an environment of continued improvement that will help develop sustainable projects and initiatives

Continuous Improvement Model



PDCA



What Lean Is Not

- Improvements made without involving those who do the work
- A “one size fits all” tool
- A method for eliminating jobs
- A one-time fix
- Assigning blame to individuals or departments

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Our First Library-wide Lean Endeavor

- Visual Management Workshop
- Process for library hosted events
 - Michigan Tech researchers and visiting authors

Event Process Challenges

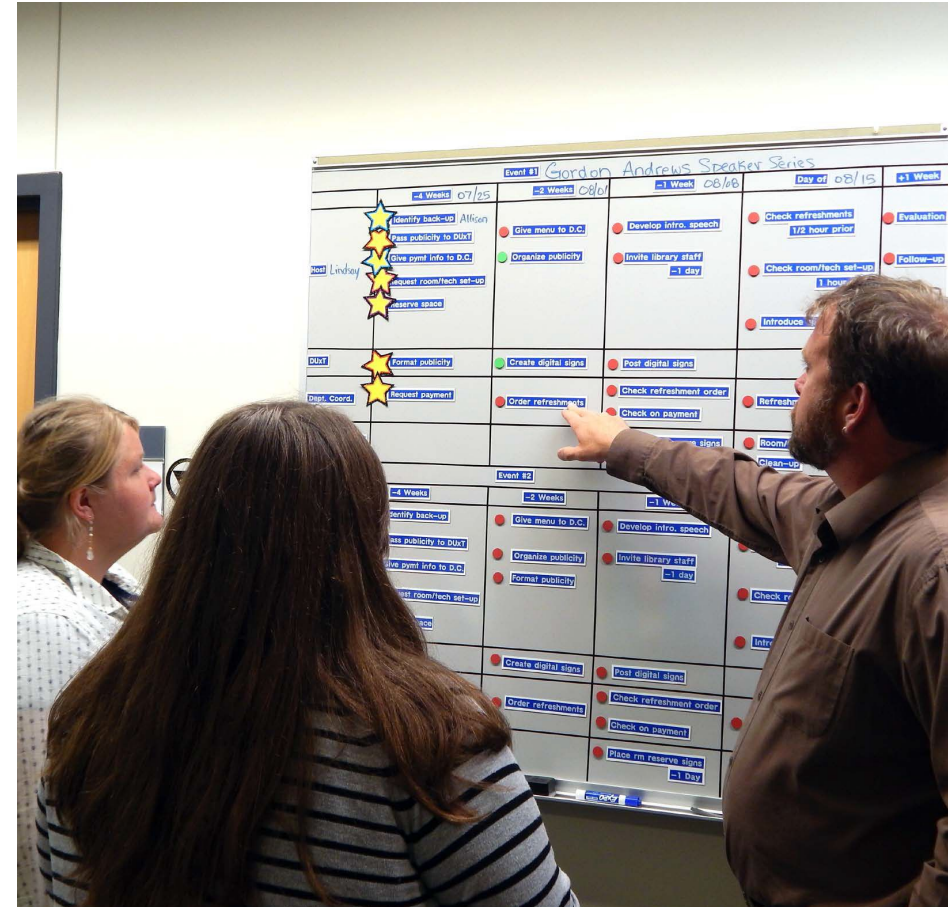
- Events often happened during busy times
- Events required coordination from many different functional areas of the library
 - 7+ people were involved in the process
- Only one person knew how to be a “host” and was retiring soon

Visual Management Workshop



Visual Management Solution

- Status at a glance
- Weekly huddles
- Four key players
- Standardized the process and created a checklist
- Sustainable process that now could be used by anyone with little to no training



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Digital Commons Kaizen

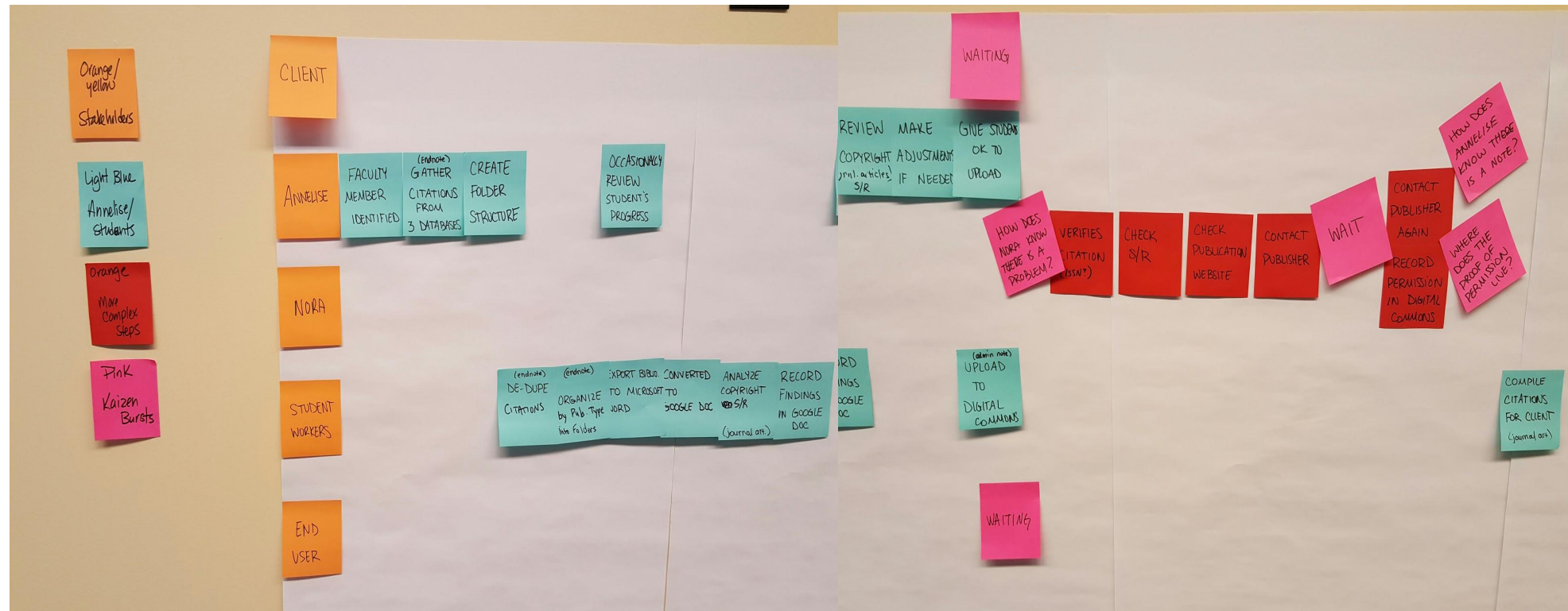
- How do we manage the process of populating an institutional repository with faculty works?
 - Acquire, process, and data entry for citations; copyright research, deposit files, and keep it organized!
- Kaizen (Kai=change, Zen=good) - Japanese business philosophy of continuous improvement
- Kaizen - Formal improvement event in which a cross functional group of people that come together to solve a problem or make a process better

Digital Commons Kaizen

- Team: Repository manager (me), Student assistant, Supervisor, Lean Facilitator, “Outside eyes”, copyright librarian
- Discuss “current state” and identify problem areas (blameless environment!)
- Use Lean tools to brainstorm possible solutions
- Post-kaizen - Implement solutions

Digital Commons Kaizen

Current State: Swim Lane Process Map



Digital Commons Kaizen

Choose potential solutions: PACE



Digital Commons Kaizen

- Main takeaway: PDCA!
 - Some solutions were lasting, some weren't, but improvement doesn't have to happen all at once. It can be incremental as long as change is a sustained effort.
 - Kaizen format provided a launching point for continued improvement, without which the Faculty Publications project would not have been sustainable for our IR.

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Just Do It! Communications Workflow Event

- Library communications projects
 - Includes all digital signs, posters, wayfinding, articles for university and local news sources, social media
 - Managed by our Communication and Technology Services (CATS) Team

Communication Projects - Challenges

- Many submission methods (email, in-person, Google group, etc)
- Hard to manage a large volume of projects
 - Deadlines were missed
 - Projects were forgotten
- Unable to tell if a project had appropriate approval
- Not enough documentation of projects
 - Errors
- Difficult to track projects to completion

Communication Projects - Improvement Event

- Root cause analysis using 5 Whys Tool
 - Why are we having so many challenges with communications?
 - Projects are not being completed on time or accurately
 - Why?
 - We forget that someone requested a project
 - Why?
 - There are too many methods for submission
 - Why?
 - There is no current procedure
 - Why?

Communication Projects - Improvement Event

- Mapped out a future state using process mapping (swim lanes)
 - Became our new process for completion of communications projects
- Decided to use visual management to aid in the new process

Communication Projects - Results

REQUEST ROUTED	PROJECT APPROVED	ASSIGNED	VEHICLES CREATED	DRAFT APPROVED	APPROVED BY REQUESTER	PRODUCED/ DELIVERED
<p>Orientation sign Project Name 8/28/17 Date Requested Jenn Sams Requester</p> <p>Magazine Storage Project Name 5/18/17 Date Requested Katie Requester</p> <p>Reception Project Name 8/1/17 Date Requested Carol Requester</p> <p>Me a Facility Card Project Name 8/1/17 Date Requested Carol Requester</p> <p>Cart sign Project Name 6/9/17 Date Requested Katie Requester</p>		<p>Archer Day sign Project Name 8/1/17 Date Requested Carol Requester</p> <p>Help Phone Sign Project Name 4/12/17 Date Requested Carol McCallahan Requester</p> <p>Chris Smith's Robert Project Name 1/1/17 Date Requested SM Requester</p> <p>4th of July sign Project Name 6/8/17 Date Requested Carol Requester</p>	<p>Service Desk Project Name 1/1/17 Date Requested Cham Requester</p> <p>Letter Reading sign Project Name 5/10/17 Date Requested Katie Requester</p>		<p>Deliver Docu Sign Project Name 12/31/16 Date Requested Carol Requester</p> <p>Disinfectant sign Project Name 5/13/17 Date Requested Annelise Requester</p> <p>Dear client sign Project Name 6/5/17 Date Requested Mia Requester</p>	
<p>HOLD LINE</p>		<p>Historic Photo Display Project Name 6/5/17 Date Requested Lindsay Hillman Requester</p>	<p>Permanent Sign Project Name 4/13/17 Date Requested Mallan Requester</p>			
<p>Waiting Approval</p>			<p>Brownie Project Name 5/11/17 Date Requested Katie Requester</p> <p>Reception Help Project Name 5/11/17 Date Requested SM Requester</p>			

Project: _____ Requester: _____	Due Date: _____ Approved By: _____ (initials)
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<p style="text-align: center;">Product Type:</p> <p style="text-align: center;"><i>Final Deliverable:</i></p> <p>Quantity: _____</p> <p>Deliver To: _____</p>	<p style="text-align: center;">Hours Change Request & Checklist:</p> <p style="text-align: center;"><i>Hours Change Requested:</i></p>
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<p>Design</p> <p>Visual/Graphics Design Needs</p> <p><input type="checkbox"/> New <input type="checkbox"/> Templated</p> <p>Textual/Copy Writing Design Needs</p> <p><input type="checkbox"/> Written by requester <input type="checkbox"/> Written by DUKT</p> <p>Signage</p> <p>Print Signage and Options:</p> <p><input type="checkbox"/> 24" x 36" poster <input type="checkbox"/> Employee door sign (office) <input type="checkbox"/> Employee name sign (directory) <input type="checkbox"/> 8.5" x 11" <input type="checkbox"/> Flyers <input type="checkbox"/> Poster <input type="checkbox"/> 11" x 17" <input type="checkbox"/> Other: _____</p> <p>Misc. Print Projects</p> <p><input type="checkbox"/> Bookmark (3" x 9") <input type="checkbox"/> Tabletent <input type="checkbox"/> Brochure <input type="checkbox"/> Postcards (4" x 6") <input type="checkbox"/> Other: _____</p> <p>Post processing</p> <p><input type="checkbox"/> Lamination <input type="checkbox"/> Mounting <input type="checkbox"/> Binding <input type="checkbox"/> Cutting <input type="checkbox"/> Specialty posting equipment</p> <p>Digital Signage:</p> <p><input type="checkbox"/> Portrait <input type="checkbox"/> Landscape</p> <p>Web Development or Change</p> <p>Web requests</p> <p><input type="checkbox"/> Media zone <input type="checkbox"/> Web updates/edits <input type="checkbox"/> New web content</p> <p>Social media</p> <p><input type="checkbox"/> Blog <input type="checkbox"/> Alert on home page <input type="checkbox"/> Facebook post</p>	<p>Regular Hours Checklist</p> <p>Digital</p> <p><input type="checkbox"/> Hours Landing Page <i>(Homepage hours widget/Archives Landing Page Widget)</i> <input type="checkbox"/> Label is admin platform for all hours <i>(API displays current hours on homepage)</i> <input type="checkbox"/> Mobile Website (cPanel Site)</p> <p>Online/Onsite</p> <p><input type="checkbox"/> Portrait Digital Sign <input type="checkbox"/> 8.5" x 11" portrait sign holders <input type="checkbox"/> Large format west Triptych Panel (exterior) <input type="checkbox"/> Archives Location 8.5" x 11" signage</p> <p>Social Media</p> <p><input type="checkbox"/> Facebook <input type="checkbox"/> Google Place</p> <p>Coming exceptions to regular hours:</p> <p><input type="checkbox"/> Information alert box <input type="checkbox"/> Print 8.5" x 11" portrait signs <input type="checkbox"/> Portrait digital sign <input type="checkbox"/> Facebook post</p> <p>Holidays & Breaks Checklist:</p> <p>Fall</p> <p><input type="checkbox"/> Labor day <input type="checkbox"/> Finals <input type="checkbox"/> R-K-Day <input type="checkbox"/> X-mas/New Years <input type="checkbox"/> Thanksgiving <input type="checkbox"/> Break Week</p> <p>Spring</p> <p><input type="checkbox"/> MLK <input type="checkbox"/> Finals <input type="checkbox"/> Winter Carnival <input type="checkbox"/> Break Week <input type="checkbox"/> Spring Break</p> <p>Summer</p> <p><input type="checkbox"/> Memorial Day <input type="checkbox"/> Break Week <input type="checkbox"/> Independence Day</p>
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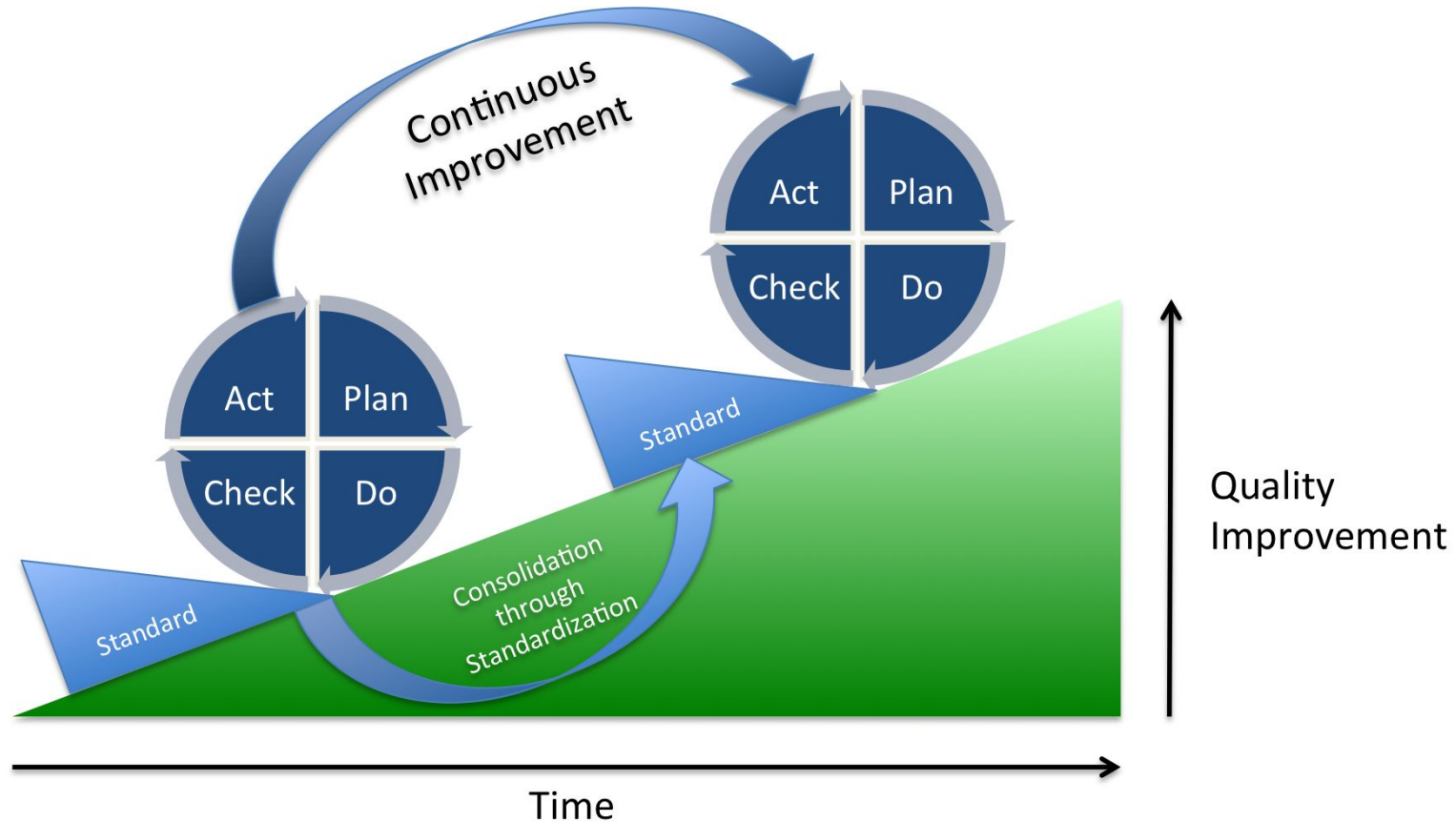
v. 3



Communication Projects - Results

- Single method of submission (online form)
- Increased communication with the requestor
 - Fewer project revisions and less errors
- Added an approval hierarchy to projects
- Project level loading between members of the technology team throughout the year
- Envelope allowed for consistency and sustainability from year to year

Sustainability through PDCA



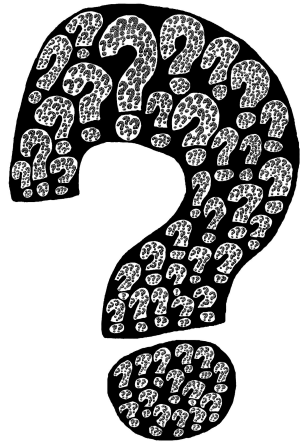
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Getting Started

- Michigan Lean Consortium
- Gemba Academy
- Books
 - Getting the Right Things Done by Pascal Dennis
 - Everything I Learned about Lean I Learned in the First Grade by Robert Martichenko
 - Lean Production Simplified by Pascal Dennis
- Lean.org
 - Blog
- Onsite visits to manufacturing, healthcare, and higher education establishments who practice lean

What questions do you have?



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