

THE UNIVERSITY OF ALABAMA®

Hands-on Lean (Non-value-added activities)

Continuous Improvement linked to the UA Strategic Plan

ALABAMA[®]

THE UA STRATEGIC PLAN: Advancing the Flagship

<u>Goal #2</u>

Increase the University's productivity and innovation in research, scholarship and creative activities that impact economic and societal development.

Objectives:

- Leverage the University's unique, emerging strengths to create a strong culture and opportunities for crossdisciplinary research, scholarship, innovation and creative activities that have economic and societal impact, and which contribute to the University's teaching and service mission.
- Invest in infrastructure that promotes a thriving research and economic development enterprise.
- Develop a multi-level, continuous improvement process that facilitates research, scholarship and creative accomplishments.
- Establish a regular dialog among the administration, faculty, staff and students that creates a climate of shared understanding and addresses opportunities for and barriers to productivity, scholarship and creative activity.
- Cultivate, support, sponsor and conduct community-engaged research that enriches our teaching, research and service missions and enhances the University's designation by Carnegie as a community-engaged institution.

<u>Goal #4</u>

Provide opportunities and resources that facilitate work-life balance and enhance the recruitment and retention of outstanding faculty and staff.

Objectives:

- Establish a Work-Life Center that encourages a family-friendly workplace by supporting a healthy work-life balance.
- Implement employment initiatives that keep UA nationally competitive while ensuring consistency, equity and inclusion.
- Establish clear channels of communication for all University employees that encourage cross-departmental collaboration and consistency.

Process Improvement Background Too busy to fix a problem?



Veterans of process improvement initiatives attest to the positive results across an institution: error reduction, risk mitigation, greater staff capacity and morale, and improved beneficiaries' satisfaction, just to name a few.





Agility: What is Agility?

It is The University of Alabama's Continuous Improvement program using Lean Higher Education (LHE) change methodology. It supports **respect for people** and **continuous improvement**.

- <u>Way of Thinking</u>: Train employees to make better decisions, be more productive, continually identify non-value-added activities or inefficiencies, and use problem-solving tools to remove inefficiencies from their processes.
- <u>Way of Behaving</u>: Engaging employees and departments by respecting each other, having a willingness and ability to collaborate to solve problems, actively soliciting ideas for improvement, encouraging teamwork and helping each other be their best.
- <u>Set of Tools</u>: Provide the support structure and methods by which process improvement can happen. Used correctly the tools help identify underlying problems and their causes which can then be addressed vs. guessing at solutions in the absence of Lean Higher Education.





Agility: Lean Higher Education

- <u>Key Features of Lean Higher Education (LHE)</u>:
 - Comprehensive approach to institutional change and improvement that transforms the work experiences of all employees. The role of leaders shifts from direct problem solver to coach and mentor.
 - Respects and balances the needs of the institution with those of its employees
 - clear directions,
 - how success will be measured,
 - delegated authority,
 - how work contributes to success of the University,
 - recognition for ideas and success,
 - feeling valued,
 - training on how to improve work, and
 - continuous coaching.
 - Employees aren't overburdened due to attrition.
 - Offers a practical framework with supporting tools that support relentless continuous improvement to drive out non-value-added activities. These tools have been used successfully at other universities.
 - Favors implementing solutions quickly, i.e., action over talking. Employees are empowered. Imperfect solutions will be enhanced or replaced via ongoing continuous improvement efforts.

From: Balzar, W. 2020. Lean Higher Education. New York: Routledge/ Productivity Press. p. 17.



Agility: Psychological Safety

Psychological Safety

- An environment that encourages, recognizes and rewards individuals for their contributions and ideas by making individuals feel safe when taking interpersonal risks.
- Employees are more comfortable showing and employing their authentic selves without fear of being negatively blamed, punished or labeled as ignorant, not a team player, incompetent or disruptive because they feel accepted and respected.
- Employees feel more comfortable asking questions, seeking feedback, discussing their mistakes, experimenting, failing in their experiments, offering opposing perspectives, raising concerns and proposing novel and unorthodox ideas.
- When present in an organization, employee performance improves.





Agility: Leadership Behaviors Supporting Psychological Safety

Psychological safety: How to say it

- This is totally new territory for us, so I'm going to need everyone's input.
- There are many unknowns/things are changing fast/this is complex stuff. So we will make mistakes.
- Okay, that's one side. Let's hear some dissent/who's got something to add/let's have some give-and-take.
- Lucy, you look concerned. Gilles, you haven't said much. Adrian, what are you hearing in the warehouse/on the phones/on the road?
- What assumptions are we making? What else could this be/could we investigate/have we left out?
- What are you up against? What help do you need? What's in your way?
- Did everything go as smoothly as you would have liked? What were the friction points? Are there systems we should retool?
- If you've got something to add, just... (mention a few channels of communication, including ones suitable for difficult conversations).
- Thank you for that clear line of sight.
- I really appreciate your bringing this to me. I'm sure it wasn't easy.

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- Share mistakes and failures rather than discourage risk taking and discussing mistakes.
 - Understand that errors are not always associated with poor performance (poor processes) and not all failure is negative. Intelligent failures, in fact, bring valuable discoveries and learning opportunities to teams.
 - Promote failure sharing by responding to the good and bad with similar appreciation. In the words of Nick Saban, "Don't waste a failure."
 - Talk about your own past mistakes and what you learned.





Agility: Continuous Improvement COCREATE CHANGE STRATEGY





Process Improvement - Non-value-added Activities

In general, there are 8 types of non-value-added activities in any process. You can use the acronym **DOWNTIME** to recognize some of the non-value-added activities that may be present in your processes.

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Defects	Overproduction	Waiting	Non-utilized talent	Transportation	Inventory excess	Motion / movement	Extra-processing

- 1. **Defects**: redoing tasks, errors in work.
- 2. **Overproduction**: producing information that no one needs or uses.
- 3. Waiting: waiting for information or a process to be completed.
- 4. Non-utilized talent.
- 5. Transportation: unnecessary report routing.
- 6. Inventory excess: obsolete or redundant data.
- 7. Motion: unnecessary motion.
- 8. Extra-processing / Over-processing: re-entering data.



WHERE LEGEN<u>DS ARE MADE</u>





Non-value-added activities - Examples

Type of non-value-added activity		Examples	Type of non-value-added activity		Examples	
Defects	Producing defective work that needs to be redone. Rework.	 Redoing tasks Errors in work Order entry errors Design errors Order changes Employee turnover 	Transportation	Transporting something further than necessary or temporarily locating something. Conveyance.	 Unnecessary report routing Excessive e-mail attachments Multiple hand-offs Multiple approvals Excessive digital movement of data or workflow 	
Overproduction	Producing too much of something or producing it before it is required.	 Producing services or information that no one needs or uses Printing paperwork before it is needed Purchasing items before they are needed Processing paperwork before the next person is ready for it 	Inventory excess	Excess stock of anything that takes up space, can hurt safety, or may become obsolete.	 Obsolete or redundant data Office supplies Batch processing transactions Printing of brochures / documents that are stored, moved, shipped, damaged, and discarded when outdated Work queues, digital data queues 	
Waiting	Waiting for anything: people, paper, machines, or information.	 Waiting for information or a process to be completed System downtime System response time Waiting approvals from others Waiting information from beneficiaries Waiting in line, sitting in waiting room, waiting for a meeting to start 	Motion / movement	Any motion that is not necessary to the successful completion of an operation / process. Employees movements during the process.	 Unnecessary motion Walking to and from the copier Central filing Walking to and from the fax machine. Walking to and from other offices Click back and forth between screens when entering information 	
Non-utilized talent	Non-utilized talent, available knowledge, skills and experience.	 Limited employee authority and responsibility for basic tasks Management command and control Staff in wrong position. Ignoring staff growths potential Lack of opportunity for employees to do their best Inadequate business tools available Building course teaching schedule around faculty teaching preferences 	Extra-processing	Processing things that the beneficiaries / internal customers does not want or that do not add value.	 Obsolete or redundant data on shared drives Re-entering data Extra copies Unnecessary / excessive reports Month-end closing activities Multiple approvals Multitasking (switch-tasking that slow down & increase errors) Back and forth scheduling emails 	

Agility

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Non-value-added Activities – Exercise





- From the non-value-added activities and impediments to flow presented, identify examples of wastes in your office or in your processes and place them on post-its.
- Think about who is directly impacted by each of the non-value-added activities you identify: the provider of the process, the beneficiary of the process, or both? Include that in the post-it and place in the specific board. Discuss with your group to present to all.
- If you think about one of the non-value-added activities on the board, can you identify the underlying cause of a problem and determine an appropriate solution? Discuss with your group and present to all.



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Causes of Non-value-added Activities

- Lack of standard work everyone is doing the task differently
- Lack of documented processes
- Unclear requests
- Outdated forms
- Redundant data entry systems don't talk with each other
- Lack of training on standardized procedures
- Paper processes
- Lack of knowledge about the process what happens up and down stream
- Lack of planning
- Lack of standardized processes and timelines
- Information gate keepers limited number of people with information who may choose not to share it to retain power and control
- Lack of technology
- Errors and rework
- Lack of retention standards or awareness of them
- Lack of trust in the process, other people, or the system
- Lack of a system or process for purging excess items
- Poor organizational skills and practices
- Lack of training on available technology
- Poor work area layout
- Culture of control and command
- Lack of trust
- Lack of appropriate tools for the job
- Unclear expectations
- Inefficient processes
- Lack of opportunity for employees to do their best
- Lack of respect

Do you recognize any of these in your day-to-day work?



Non-value-added Activities – How to Eliminate Them

Type of non-value-added activity		Examples	Possible ways to eliminate non-value-added activities	
Defects	Producing defective work that needs to be redone. Rework.	 Redoing tasks Errors in work Order entry errors Design errors Order changes Employee turnover 	 Establish standardized work procedures and office forms. Further training. Create and post job aids. Implement error-proofing process / systems to reduce physical & mental burden of checking Goal-settings and metrics 	
Overproduction	Producing too much of something or producing it before it is required.	 Producing services or information that no one needs or uses Printing paperwork before it is needed Purchasing items before they are needed Processing paperwork before the next person is ready for it 	 Planning Establish a workflow sequence to satisfy the downstream beneficiary. Create workplace norms and standards for each process. Create signaling devices to prevent early processing. 	
Waiting	Waiting for anything: people, paper, machines, or information.	 Waiting for information or a process to be completed System downtime System response time Waiting approvals from others Waiting information from beneficiaries Waiting in line, sitting in waiting room, waiting for a meeting to start 	 Review and standardize required signatures to eliminate unnecessary ones. Cross-train employees to allow workflow to continue while somebody is out. Balance the workload throughout the day to ensure optimal use of all people. Make sure the equipment and supplies are available. Advanced planning and scheduling 	
Non-utilized talent	Non-utilized talent, available knowledge, skills and experience.	 Limited employee authority and responsibility for basic tasks Management command and control Staff in wrong position. Ignoring staff growths potential Lack of opportunity for employees to do their best Inadequate business tools available Building course teaching schedule around faculty teaching preferences 	 Question the process and the way things are done. Take the risk necessary to apply new thinking to a process. Encourage local teams and workgroups to make process improvements. 	



DOWNTIME



Non-value-added Activities – How to Eliminate Them

Type of non-value-added activity		Examples	Possible ways to eliminate non-value-added activities	
Transportation	Transporting something further than necessary or temporarily locating something. Conveyance.	 Unnecessary report routing Excessive e-mail attachments Multiple hand-offs Multiple approvals Excessive digital movement of data or workflow 	 Make the distance over which something is moved as short as possible. Eliminate any temporary storage or stocking locations. Make changes in the process or layout. 	
Inventory excess	Excess stock of anything that takes up space, can hurt safety, or may become obsolete.	 Obsolete or redundant data Office supplies Batch processing transactions Printing of brochures / documents that are stored, moved, shipped, damaged, and discarded when outdated Work queues, digital data queues 	 Produce only enough to satisfy work requirements. Standardize work locations and the number of units per location. Ensure that work arrives at the downstream process when required and does not sit there. 	
Motion / movement	Any motion that is not necessary to the successful completion of an operation / process. Employees movements during the process.	 Unnecessary motion Walking to and from the copier Central filing Walking to and from the fax machine. Walking to and from other offices Click back and forth between screens when entering information 	 Standardize folders, drawers, and cabinets throughout the office area. Arrange files in a way that they are easily referenced. Arrange work areas of office equipment in central locations. Purchase additional office equipment. Streamline processes based on unnecessary movement 	
Extra-processing	Processing things that the beneficiaries / internal customers does not want or that do not add value.	 Obsolete or redundant data on shared drives Re-entering data Extra copies Unnecessary / excessive reports Month-end closing activities Multiple approvals Multitasking (switch-tasking that slow down & increase errors) Back and forth scheduling emails 	 Review value-added steps in each process and eliminate steps wherever possible. Review all signature requirements and eliminate signatures wherever possible. Use Scheduling Assistant to schedule meetings. 	



DOWNTIME

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