



Continuous Improvement Lunch & Learn: Tricks to Become More Efficient

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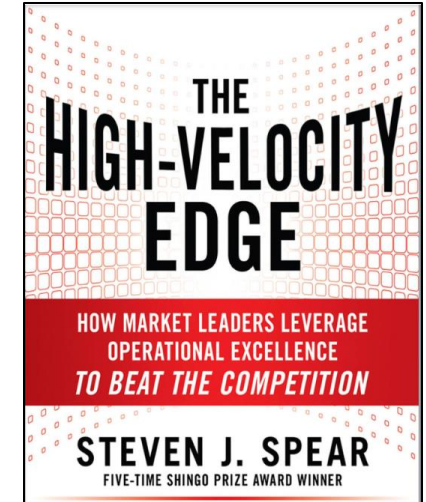
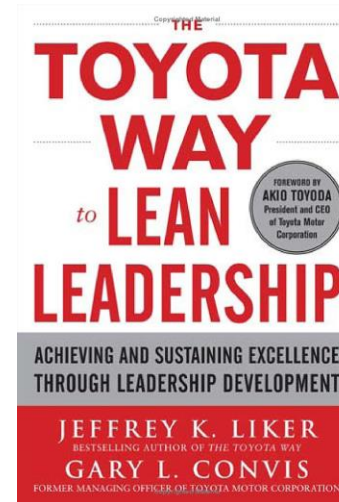
What is Continuous Improvement

Continuous Improvement is a method and philosophy to strive for perfection for everyday execution of your processes, products or the services to your customers. This can be obtained in small increments steps or larger process improvement projects.

Continuous Improvement is an umbrella term that encounters many methods. Examples: Lean & Six Sigma

Today I will introduce 3 Lean Tools:

- Go and See
- 5S
- Waste Observation Form



Go and See



How to Go and See, ask Why, show respect

Someone has come to you because they have a problem/issue.
What is the first thing that you do in order to resolve the problem?

Always Go and See to
collect facts about the
problem before
experimentation starts

Go and See - The Actuals

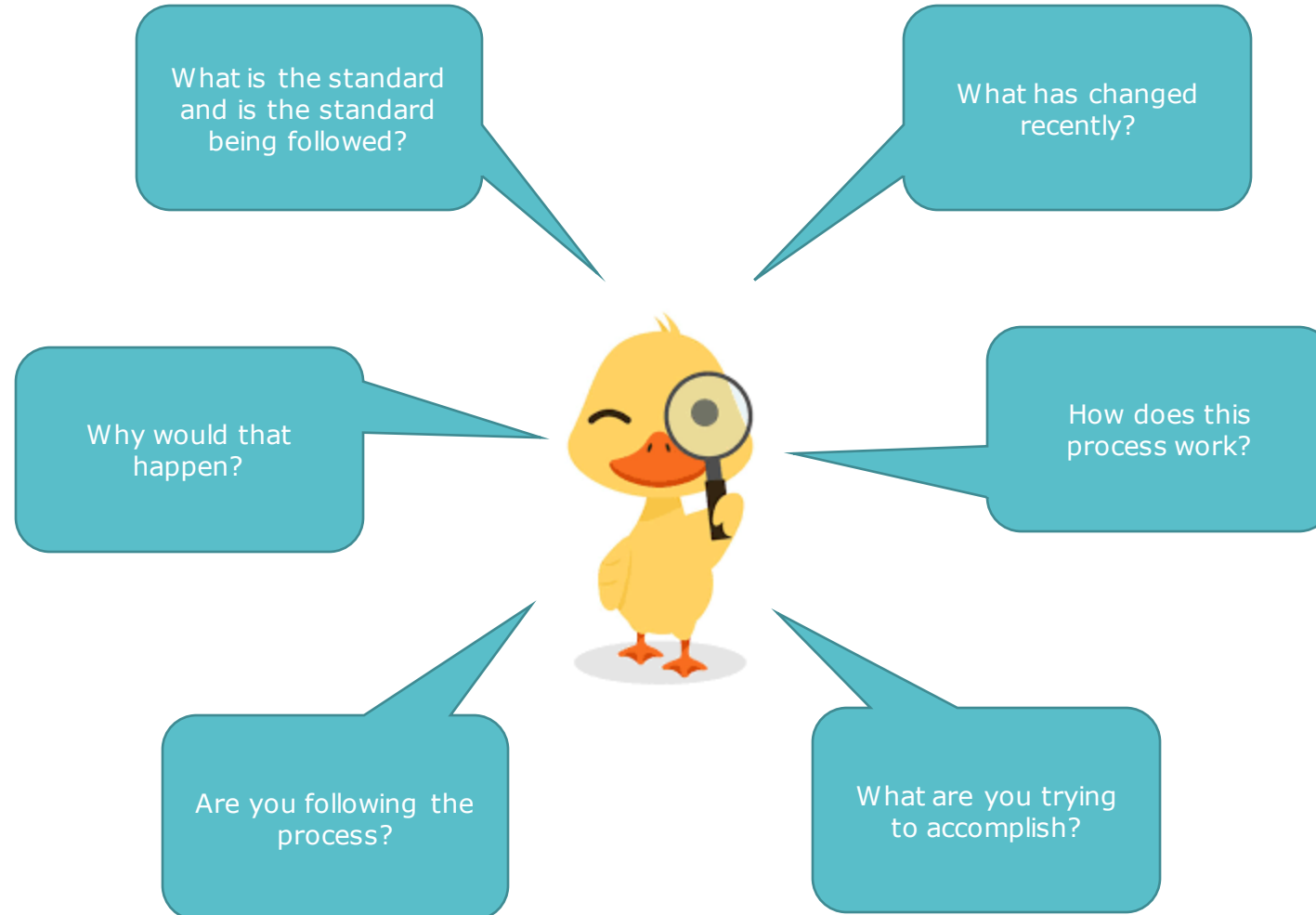
Observe the **actual** work

Observe the **actual** person


Observe the **actual** place

Observe the abnormality at
the **actual** time of occurrence.





Questions to Ask or Observe



Go and See Form

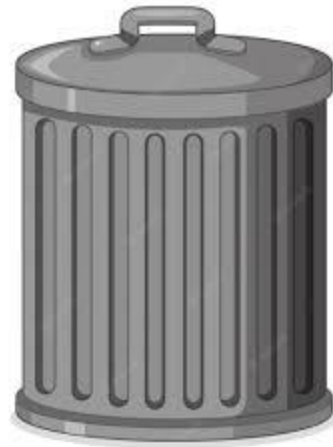


GO & SEE FORMAT

Name1 (Who Attended Go & See?)	<input type="text"/> 
My Organization	<input type="text"/> *
Date of GO & See	<input type="text"/> 
Purpose of GO & SEE	<input type="text"/> *
Organization Viewed	<input type="text"/> *
Who Did I Meet With?	<input type="text"/> 
What Did I Learn?	<input type="text"/> *
Who will I share with?	<input type="text"/> *
Attachments from Go & See	 Click here to attach a file
Which of my processes will be impacted?	<input type="text"/> *

Waste Observation Form

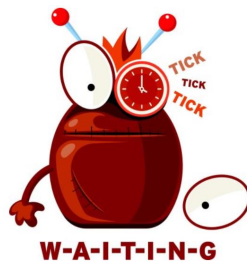
TIMWOOD



Waste Observation Form

A Tool to be used to document, present, and analyze opportunities to eliminate waste in an area, department or process.

Waste is typically categorized into 7 types:



Created by Ivan Torrey

Transportation

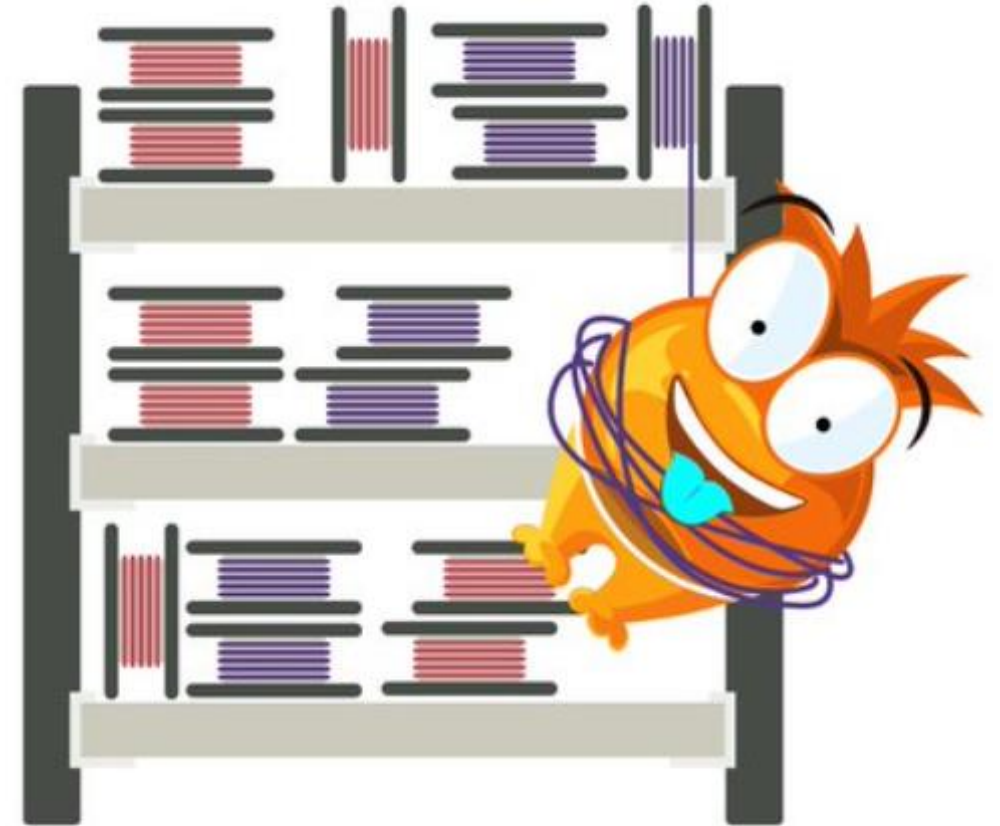


TRANSPORTATION

Transportation – the movement of product in between processes. Are you moving a product over potentially long, unnecessary distances? Transportation waste causes delays and can end up damaging products and equipment.

Inventory

Inventory – raw material, work-in-process or finished goods that sit around. Do you have more than you need piled up on a shelf, in a warehouse or in your office? When you have a lot of excess “stuff,” you probably have more inventory than you need – and that’s expensive!



INVENTORY

Motion



Motion – the wear and tear on equipment and people; the movement within a process rather than the movement of material between processes (transportation). Do you have to stretch too far or maneuver in uncomfortable ways to do your work? It's better to have the products and equipment in an easy and comfortable position to prevent stress and save time.

Waiting

Waiting – any idle time produced when two interdependent processes aren't completely synchronized. Are you sitting around waiting for a machine, products, people or information? That's a waste of your time... and it's frustrating! Less waiting frees you to do more productive work.



Over-Production



OVER PRODUCTION

Over-Production – making more than is necessary; producing something before it's needed or producing too much of a product. Do you really need those big batches? How much stock is required to complete the job? Extra inventory needs to be stored and transported which ends up costing money and space.

Over-Processing

Over-Processing – putting more time and effort into a process or product than is necessary. Are you overdoing it? If you don't know exactly what the customer wants, how can you align your processes to what the customer needs? You will reduce over-processing by setting clear expectations around what is acceptable for the work at hand. There may be a better way that saves you time and money.



Defects



DEFECTS

Defects – errors in information, products or services that cause rework. How often is it right the first time? Do you have standard processes? Are they designed appropriately? Is there an equipment maintenance schedule? Is it followed? Are operators trained properly? Are policies reinforcing the right behaviors? Do embedded tests alert you to problems when they surface? It's important to find defects as soon as possible and identify their root causes so they don't happen again.

Waste Observation Form

Waste Observation Form		
Area: _____		Observers: _____
Date: _____		
Observation	Type of Waste*	Notes (Comments, issues, solutions to consider)
Safety or Environmental Issues:		

*Types of waste are: Transportation, Inventory, Motion, Waiting, Over Production, Over Processing, Defects

TIM WOODS Waste Observation Form

Type	Observations
T Transportation Moving items unnecessarily	
I Inventory Items or information that is never used or not needed	
M Motion Unnecessary movements within workplace	
W Waiting for information or items to arrive	
O Over Processing Doing work better than is needed	
O Over Production Doing more work than demanded	
D Defects Reworked and scrap high level to be avoided	
S Skills Not using workers to fullest abilities	

Business Performance Improvement - BPI Forum



5S



5S

5S is a method of creating a clean and orderly workplace that exposes waste and makes abnormalities immediately visible. This method can be used in any industry.

Sort: Discard and remove non-essential items

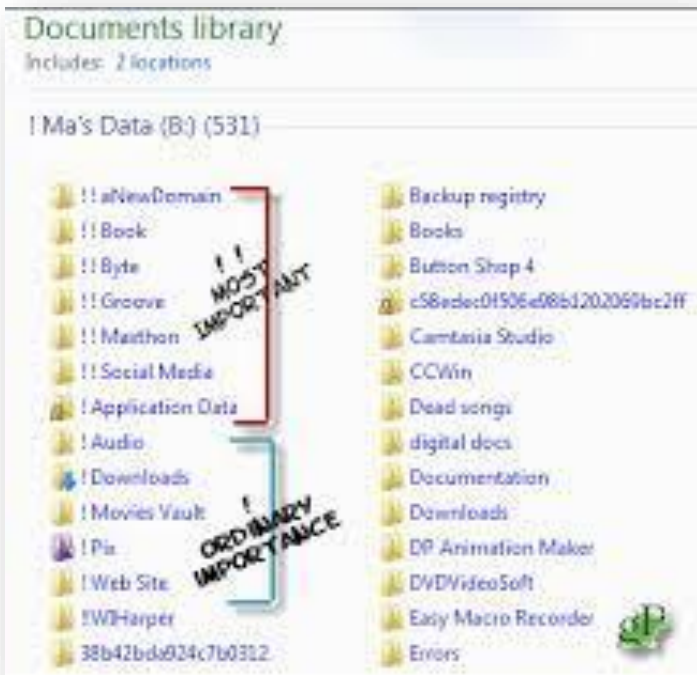
Set: Create a place for everything and put them where they belong

Shine: Clean the area and items

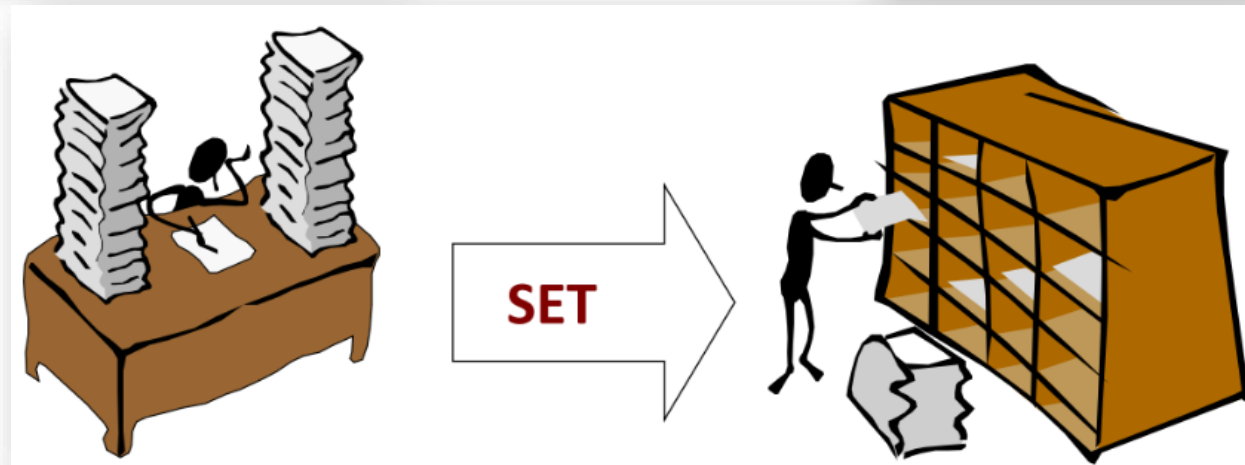
Standardized: Set up rules and policies to keep the area clean and organized

Sustain: Audit for compliance

Sort



Set



Shine



Standardize

Before



After



Sustain



Sustain ensures you continually reap the benefits of your 5s deployment gaining improved efficiency and reduced waste.

5S Forms to end conversation

5S STORE
Organizational Support

5S Audit Form

	Status	Being done	Audited
Sort			
Set in Order			
Shine			
Standardize			
Sustain			
TOTAL SCORE (of the above 25 items)			100

5S Office Evaluation Review

Date: _____ Evaluation Area: _____

5S Element	Number	Evaluation Criteria	Rank these items from 1 through 5: 5 being well done	Score (1-5)	Idea / Suggestions / Comments
SORT	1	Are the areas and shelves open and clear?	All items that are not necessary or useful have been removed from the area used as preferred.		
	2	Is the office free of any piles of files?	Complete whether there are any chemicals, water, oils or other materials that may be hazardous in the area or on the floor.		
	3	Is the office free of any clutter, articles and boxes?	Are items that are not needed been removed from the work zone (i.e. machines, printers, detectors, extra files)?		
	4	Is the office free of any boxes, newspapers, magazines, etc.?	Evaluate against how many items are in the processing area for work. Assess if the materials, parts and supplies in the area are currently needed for the job. Close to actually needed is better.		
	5	Is the information board visible?	All announcements are displayed promptly and in good presentable shape. Arrangement is straight and clear under appropriate headings.		
	6	Are the areas under and above the floor clear?	Extra items are not on the walls, shelves, underneath, or hanging of pipes that are not necessary.		
Category Subtotal					
Sort Score: Subtotal divided by 6					
SET IN ORDER / STRAIGHTEN	7	Evaluate any instrumentation storage.	Only instruments required for jobs are stored at the point of use. These instruments are stored neatly and in an orderly fashion that is recognizable and retrievable to operators.		
	8	How are the shelves, desks, and work surfaces arranged?	All locations of items are labeled, marked, and in a known if they are moving.		
	9	How are the tools and materials stored in the area?	No items are sitting on walls, tucked in corners, too close to ceiling or equipment, impediments, or other clutter.		
	10	Evaluate container and any packaging handling and labels.	Boxes, storage containers, and other items are stored in the appropriate place and contained well to the area. Containers are secure and not leaving any danger to the people working in the area.		
	11	Assess color and where items are held on the floor.	Nothing is sitting directly on the floor and no materials are left around the area. Items that need to be on the floor are clearly marked and positioned in designated areas clearly marked on the floor.		
12	Examine to assess the tools, equipment and containers.	Identify, mark, tag, attachments, and fixturs are organized so that they are all easily obtainable. Consider this as well for any kind of tool needed for a job including cutting and measuring something.			
Category Subtotal					
Set in Order / Straighten Score: Subtotal divided by 5					
SHINE / SHEEP	13	The storage of supplies and any tools.	Arrangement of all supplies, tools, and materials are kept in clear area for storage and no risk of being obstructed during movement around office.		
	14	Clear when equipment needs maintenance and when not operational.	Infrastructure or equipment in the office is marked, highlighted, and labeled. Check sheets available for high-value equipment. Maintenance is scheduled for critical equipment.		
	15	Assess the condition of the office.	How does this area appear? How may be utilized. Look under desks and behind work spaces to see if there is garbage and other unnecessary items.		
	16	Assess status of equipment in the area. Observe overall appearance.	Are machines and equipment broken to be on a schedule of cleaning?		
Category Subtotal					
Shine / Sheep Score: Subtotal divided by 4					
STANDARDIZE	17	Is there visual order (signposting and color coding)?	A clear and present color coding system is present in the office and across departments. It is clear that standards are being maintained and improved on.		
	18	Assess the access ways to areas of emergency.	All emergency systems (i.e. vehicles, fire extinguishers, and emergency equipment) are of substantial and clear at all times. Access to electrical controls and lines are marked, and free of any obstructions. Pathways are clearly highlighted for direction, and access unobstructed at any moment.		
	19	The work areas are bright with light and clearly marked.	Height is marked, quantity of materials are known, and min is max. The available paper for materials number of categories required, some marks, qualified paper, and general office material needed.		
	20	General area has quantity limits for materials and are marked clearly.	Is there clear document control of information in the office?		
Category Subtotal					
Standardize Score: Subtotal divided by 4					
SUSTAIN	21	The work areas are clean and maintenance is clear.	Areas are never full of anything and are clear for passage. All items are protected not stored in the area and change is not to make accessible for transportation.		
	22	Reservations and other formal plans are available to company general.	Is like a maintenance system that allows for control of change and improvement of 5S in the office.		
	23	Apply to shared resources and tools to be left clean in place for change.	Is self-discipline maintained to ensure that all equipment, tools, supplies, materials, and shared equipment is put back in the same spot. The effort of putting back should not require organizational skills.		
	24	Evaluate the involvement of management in 5S.	Management are actively involved in the entire process of 5S and are supporting improvement activities of the office.		
Category Subtotal					
Sustain Score: Subtotal divided by 4					
					Total "Category Subtotal" divide by 20 average 5S score: TOTAL

Recap

What did we Learn?

- ❑ What is Continuous Improvement
- ❑ Go and See
- ❑ Waste Observation Form
- ❑ 5S

Questions?



Virtual Lunch and Learns

- September 14th – “Eliminating Barriers: Supporting Student Basic Needs” REGISTRATION IS OPEN
- November 9th – “Diversity and DEI in the universities: Impacts of the Supreme Court decision” – REGISTRATION NOT OPEN YET
- January 10th – “AI in the Workplace and HR considerations” – REGISTRATION NOT OPEN YET

Quarterly Networking events

- October 5 & 6 - Crystal Mountain, Thompsonville MI – Registration not open yet
- December 7 & 8 – Ann Arbor – Registration not open yet

Want to be more engaged with MCEEA?



Become a member – [MCEEA - Membership Form](#)

Interested in becoming a committee member? Reach out to one of the following

- Joe Bamberger, President - jbamberger@emergejobs.com
- Korina Kasperek, President Elect – korina.Kasperek@dteenergy.com