

LEAN.

THE RPI*

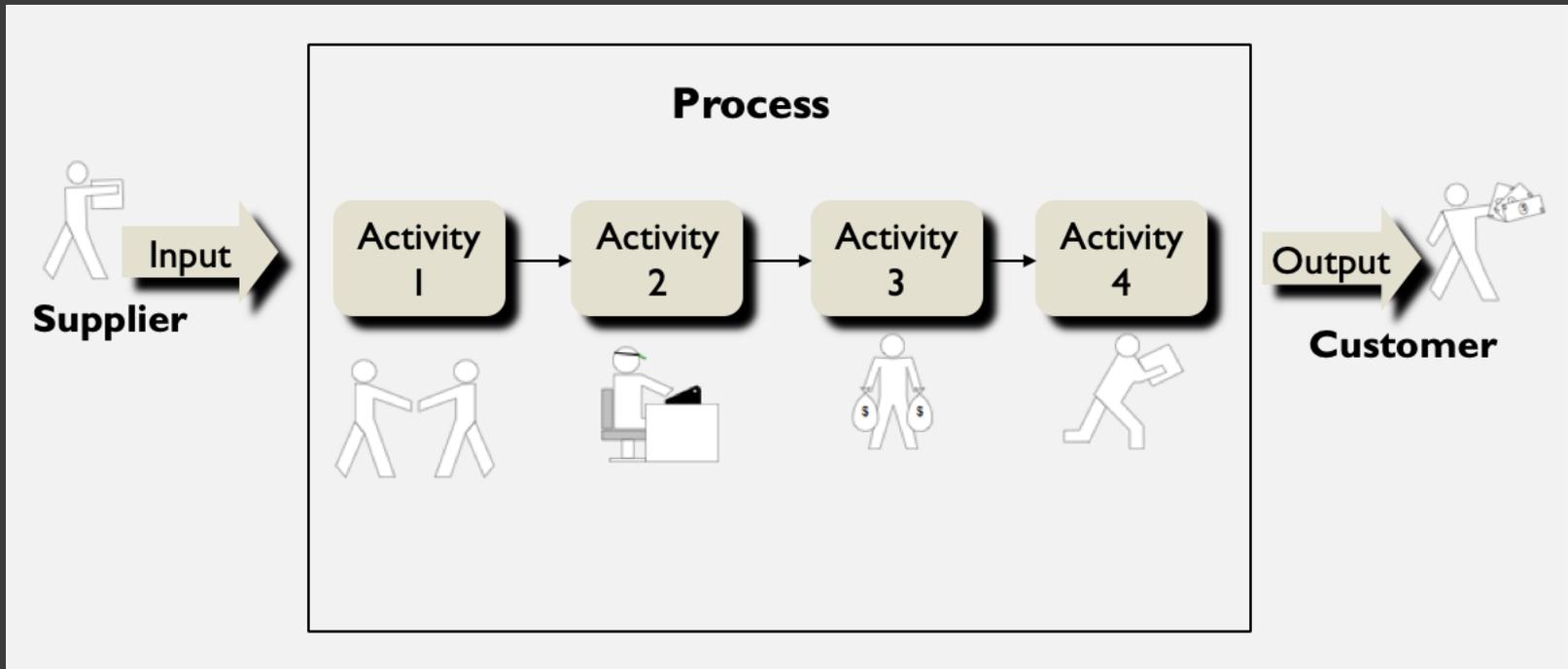
*Rapid Process Improvement
Workshop

“Facilitating
in a better
way”

Presenters:

S. Paddy O’Brien
Tori Algee

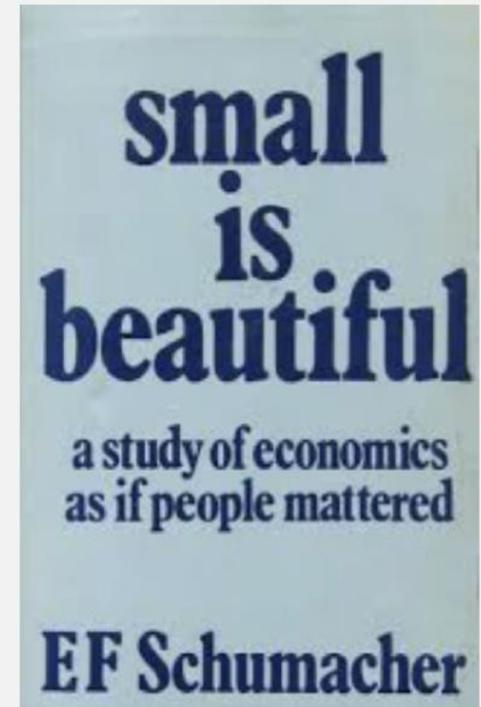
Lean Transformation Conference, October 8-9, 2019, Tacoma, WA



Schematic of the components of a process

AKA a Rapid Process Improvement

- “kaizen”
- Focus on streamlining work
- 2-5 day continuous work session
- Facilitator and a staff work team
- Improvement ideas are tested
- Recommendations doable within the week or under 30 days



Explanation of a kaizen/RPI

FACILITATION involves two views (at the same time)



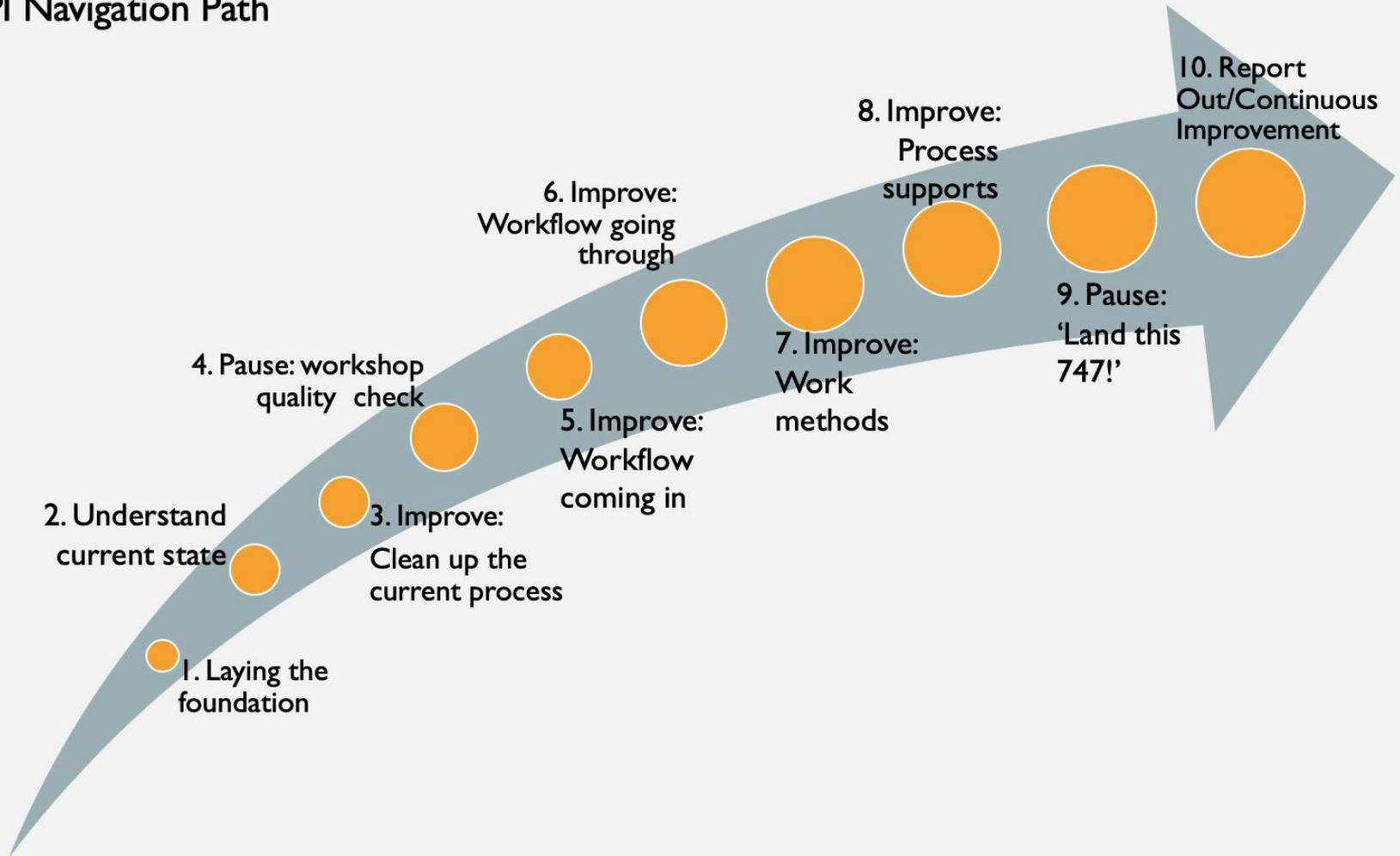
The macro view



The micro view



RPI Navigation Path



THE PATH: WHAT IS DIFFERENT?



- Laying the foundation.
- Improve right away: clean up the process.
 Improve the flow in all parts of process.
- Pause...Review the charter again.
- Improvements tied to Continuous Improvement efforts.

THE JEEP VIEW

This is the DETAIL:

WHAT IS TO HAPPEN AT
EACH STEP IN THE
WORKSHOP





I. Laying the foundation

- a. Introductions
- b. Administrative items
- c. Charter
- d. Review background packet/flowchart

What's different?

- Process thinking review
- Give team context.
- Data collection map

- Plan, Do, Study, Act Forms

EXERCISE: ICEBREAKER ROLE PLAY (partial)

Facilitator (F): Please tell the group your job title and the main thing that you do in your job. I want you to think about what you do that is repetitive, not just one-time tasks.

Team member (TM): My job title is “provider data entry clerk” and the main thing I do is sit at the computer all day and key in information from filled-out forms.

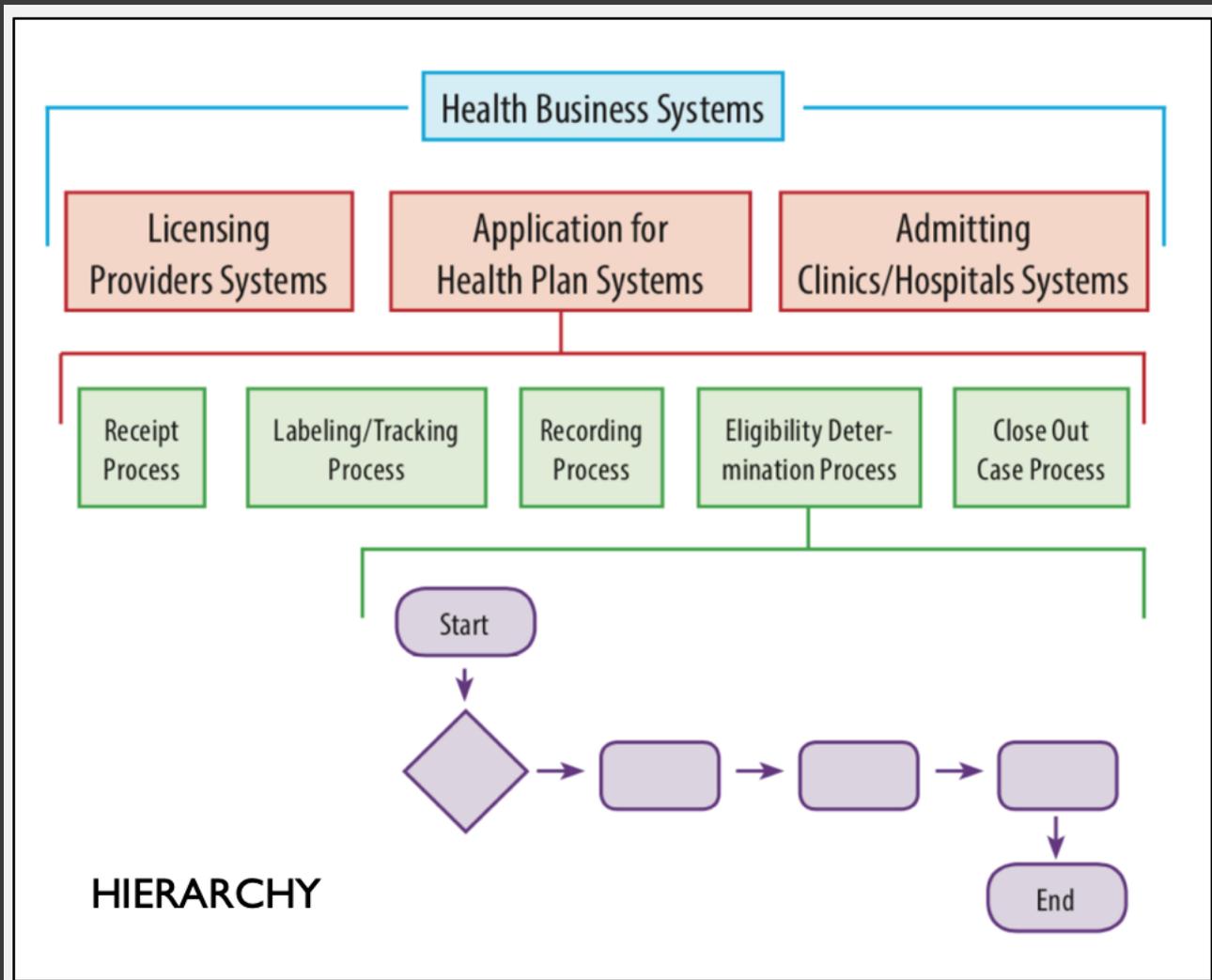
F: That’s great. Let me help you think about this in terms of a process. Remember, I said there was a beginning to a process? The “thing” that begins your work is a form. We call that the input. And I said that something comes out at the end of the process and we call this an output. The output is delivered to the customer.

Now let me ask you another question: do you know who your customer is?

TM: We don’t have customers!

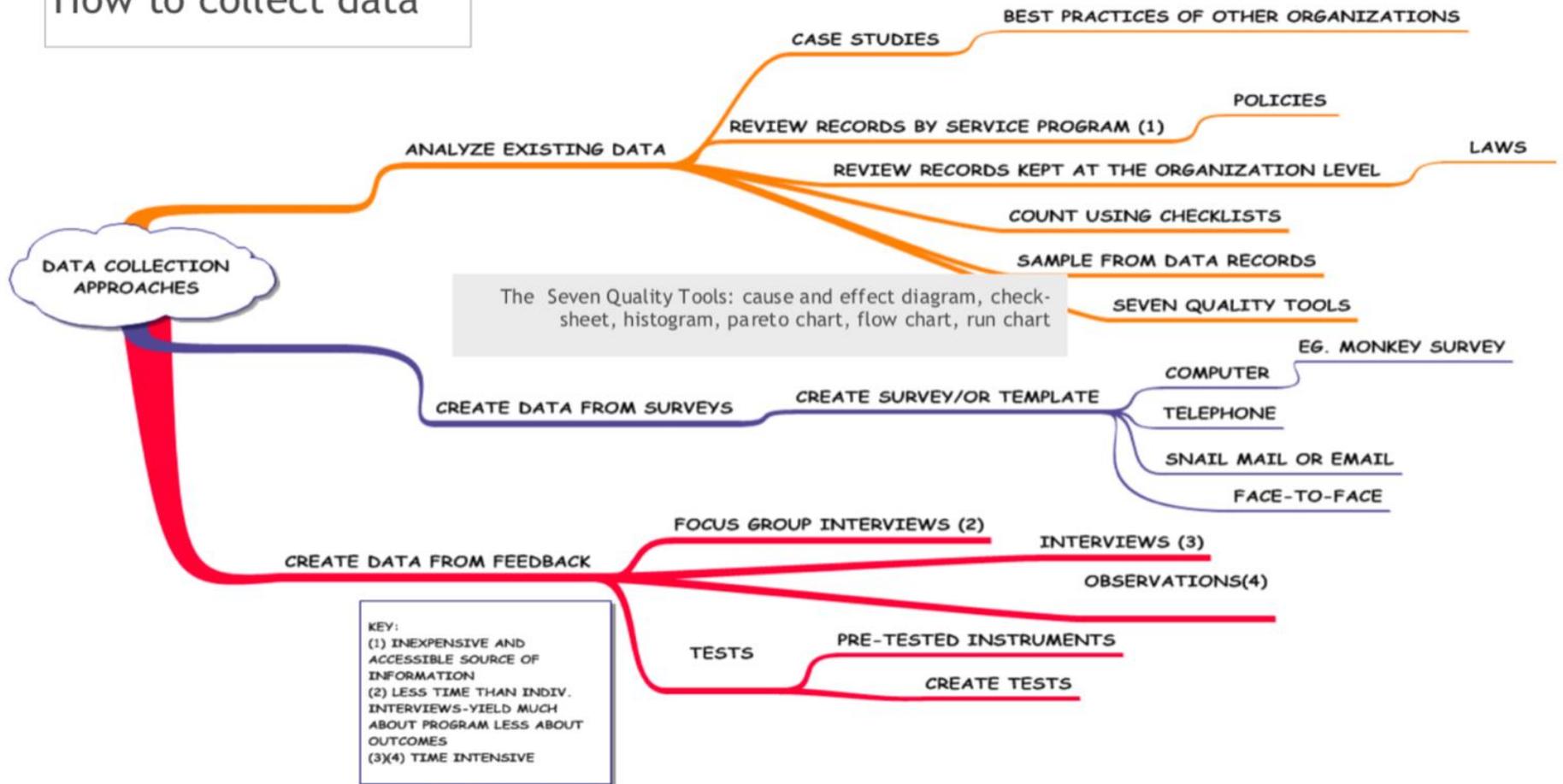
F: Ah, but you do. The term “customer” is something we are not used to. Think of it as the person who receives the service or piece of paper. If you are a provider data entry clerk, then I imagine that your customer at the end of this whole process is a provider.

TM: Oh, that’s right. All of us working next to each other know somehow that our work is getting doctors and hospitals into the system so that they can be registered and then paid. Etc...



TO EXPLAIN WHERE THE WORK OF THE RPI FITS

How to collect data



A LISTING OF DATA TOOLS FOR THE RPI TEAM

Plan, Do, Study, Act (PDSA) Form

(please use for all improvements, even though some of the improvements are low-hanging fruit.)

Plan (What could be the most important accomplishment of this team? What changes might be desirable? What data are available?) to test an improvement idea?

Name the improvement. Plan what you are going to do to test it?

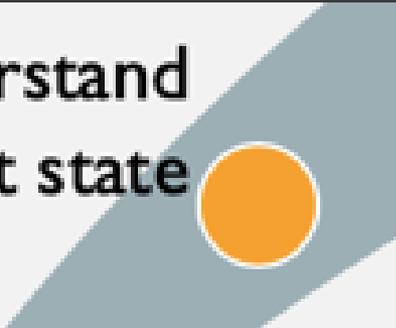
Do-Carry out the test decided upon, on a small scale.

Study-Observe the effects of the test. Did things improve, get worse, or stay the same?

Act -Study the results. What did we learn? Should we implement organization-wide?

A BLANK PDSA FORM USED TO COLLECT
IMPROVEMENT IDEAS

2. Understand current state

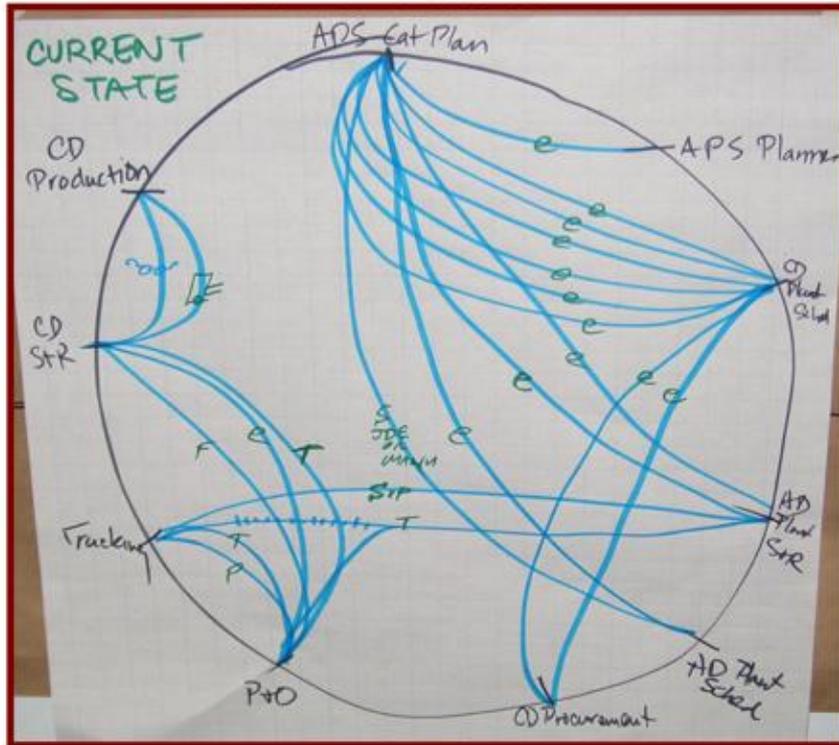


- a. Walk the process
- b. Make spaghetti, handoff charts
- c. Backlog
- d. Estimate times

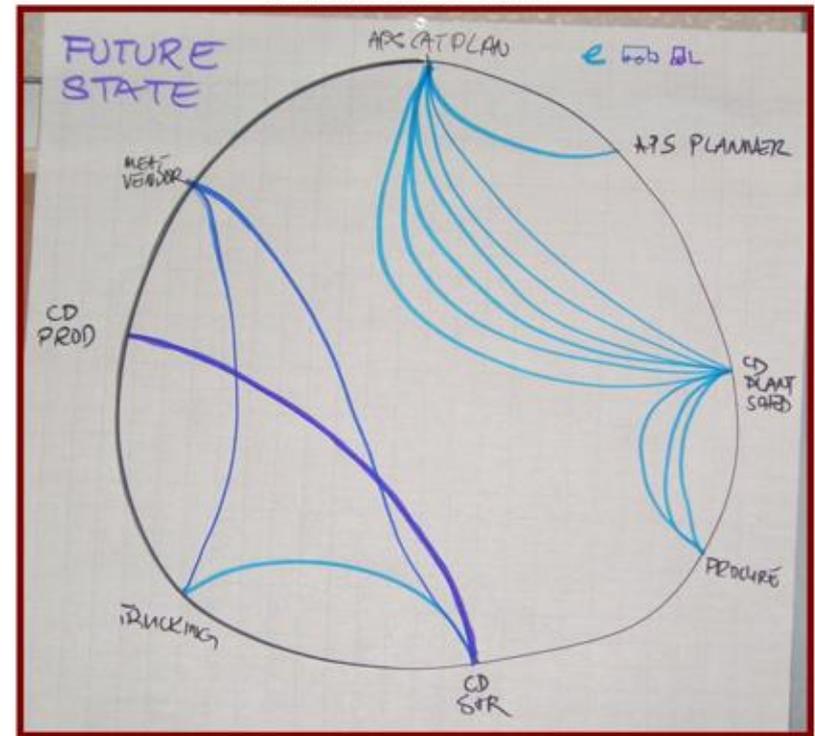
What's different?

- Backlog plan

Current State



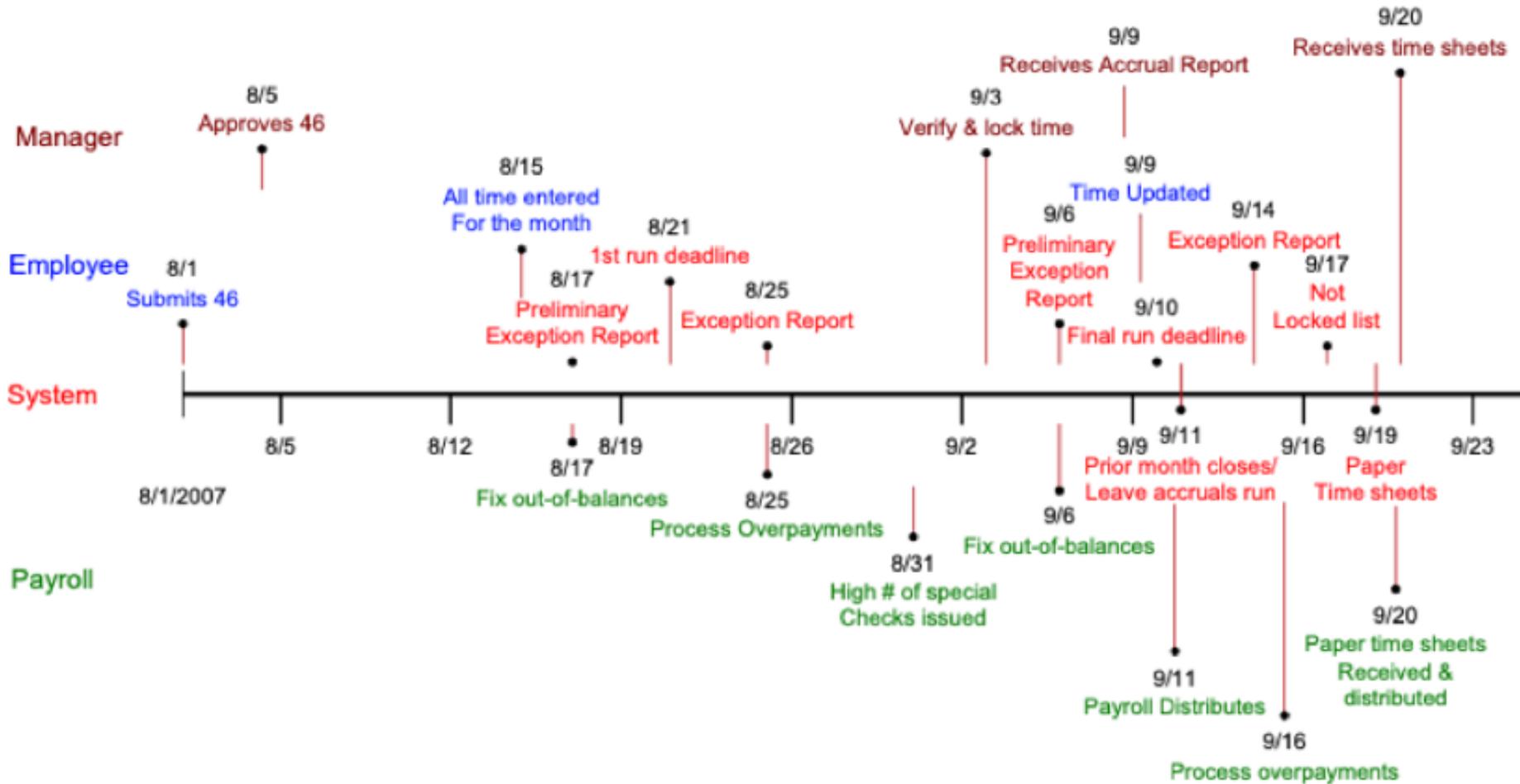
Future State



	<u>Current State</u>	<u>Future State</u>	<u>Change</u>
Planning Handoffs:	13	10	(3)
Production Handoffs:	9	4	(5)

HANDOFF CHART

Payroll Process Timeline



EX. OTHER INFORMATION COLLECTED DURING THE WALK-THRU

BUCKETS	BACKLOG
223- <u>Redeterminations</u>	18 days out
15- 859 A's	8 days out
504- Changes & Misc.	25 days out

-North Valley Processing Center RPI

Backlog summary									
Number of workers		17							
Remaining backlog									
Day	Recert	Medical	852	853	APR	943	Ret. Pend	Other	
Baseline	400	331	226	55	46	16	38	135	
6-Oct	375	317	219	55	42	14	34	127	
7-Oct	338	308	194	52	37	13	30	109	
8-Oct	303	291	178	50	34	12	24	81	
9-Oct	273	267	160	45	30	11	14	56	
10-Oct	249	247	138	41	28	10	3	34	
13-Oct	234	233	132	38	27	7	0	25	
14-Oct	224	228	125	35	25	7	0	7	
15-Oct	213	219	112	29	25	7	0	0	
16-Oct	211	204	110	15	25	7	0	0	
17-Oct	211	204	110	15	25	7	0	0	
Completed backlog									
	Recert	Medical	852	853	APR	943	Ret. Pend	Other	
6-Oct	25	14	7	0	4	2	4	8	
7-Oct	37	9	25	3	5	1	4	18	
8-Oct	35	17	16	2	3	1	6	28	
9-Oct	30	24	18	5	4	1	10	25	
10-Oct	24	20	22	4	2	1	11	22	
13-Oct	15	14	6	3	1	3	3	9	
14-Oct	10	5	7	3	2	0	0	18	
15-Oct	11	9	13	6	0	0	0	7	
16-Oct	2	15	2	14	0	0	0	0	
17-Oct									

Example of data about backlog -Medicaid Provider Unit RPI

EX. DATA COLLECTED ON THE BACKLOG

Example: 425 applications in the backlog; all the while new applications are coming.

1. Gather data

- # of pieces of paper (e.g. applications or requests) in the backlog.

2. Measure cycle time for one unit.

- Pick both the high producer and the low producer workers in the process. Conduct time observations (at least 5 cycles; then average) of each. Then get an average cycle time from the two workers. (one worker takes 30 minutes average; the other takes 60 minutes average = 45 minutes.) Example: it takes 45 minutes to process one application.

3. Calculation: cycle time for one app=45 minutes. Hours in the workday = 7.5 hours. Convert to minutes (7.5×60) = 430 minutes.

4. Number of apps that can be completed in one day by one worker = 9.1 apps. ($430/45 = 9.1$).

5. Number of days to eliminate current backlog = estimated 46 days. ($425 / 9.1 = 46+$ days for one person.

6. Want to clear up backlog quicker? Two people can do 18 apps per day ($425/18 =$ estimated 24 days.

A PLAN TO CLEAR THE BACKLOG



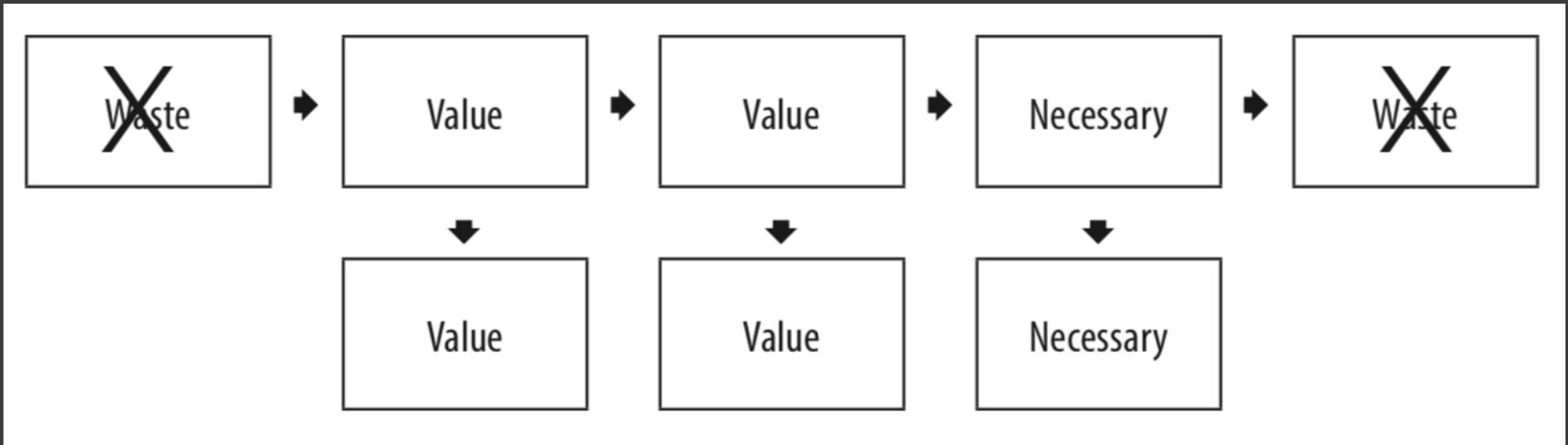
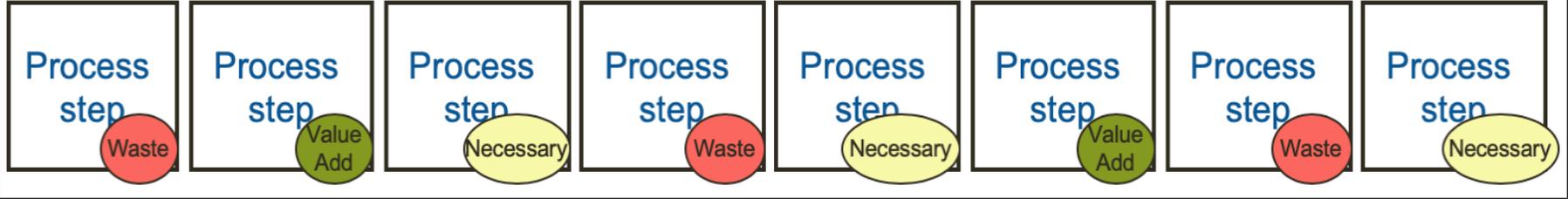
3. Improve:

Clean up the
current process

- a. Conduct step-by-step analysis
- b. Note times between steps
- c. Cause of loopbacks

What's different?

- Questionnaire for step-by-step analysis



EX.THIS IS WHAT THE TEAM DOES IN A STEP-BY-STEP ANALYSIS

ABOUT THE QUESTION

Note: the whole point of the questions is to see if the step 'moves the product or service through' the process to get it to its final form before it gets delivered to the customer.

Questions to ask: Value of a Step?

Q.1....a. Is this step necessary because of a law or regulation?
b. Does this step physically change the product or service going through the process?

About the Answer YES

Note: Keeping these steps in may suffice for now, but there is more improvement waiting. The step could be moved in its sequence or combined with other steps. For now, all we want is to remove the steps that are of obvious no value.

a. keep the step in the process
b. Keep the step in the process

About the Answer NO

Note: For every step that the answer is 'no' to, make sure that if you eliminate it, that it doesn't adversely affect another part of the pro-

ABOUT THE ACTION

Note: Some steps can be readily eliminated; other steps need more investigation while still other steps don't seem very valuable, but are considered necessary. For example, a law states that the step needs to be complete.

B. For example, this means someone 'touched' it and wrote on it, separated it or attached it to something. Rather, it didn't just sit idle. The litmus test is 'did this step move the piece of paper closer' to the final form it should be? If no, these are probably steps that say 'file' or 'pend it', etc. If so, then our process is not moving toward ideal, or the process would have continuous flow and work would be completed on the same day it came in.

NEW TOOL: HELP THE TEAM DETERMINE HOW TO LABEL THE STEPS IN THE PROCESS

4. Pause: workshop quality check



- a. RPI's don't have to be a week.
- b. Check the charter again.

What's different?

- Pausing to review the charter

Example: Charter from Crook County Health Clinic RPI

Team Leader (for Implementation and Evaluation):	Nelda, RN	Facilitator: Paddy																		
	Name, Office/Unit																			
Team Members	Nelda, Karen, Kris, Wendy, Mariah, Jessica																			
Sponsor(s)	Muriel, RN																			
Problems/Need for WS: (1-3 bullets):	<ul style="list-style-type: none"> • Long exams increase costs. • Decreased revenue. • Wait time is so extensive, clients drop-out. 																			
Primary goal of WS:	To improve customer service. Reduce cost, through increased efficiency.																			
Scope:	Clinic flow from time clients seek service to when they leave with prescription or treatment plan.																			
Baseline data:	None at this time.																			
Key Dependencies:	Dependent on resources: staff, supplies, computers.																			
Expected Benefits (Qualitative):	More people successfully accessing the services. Public image improved. Employee morale increased.																			
Targets: Indicators/Metrics (Quantitative):	Increase number of clients seen by 75%. Decrease exam process time by 25%. Decrease clinic visit cycle time by 25%. Increase revenue by 50%.																			
Major Deliverables:	Improvements in establishing standards for exam flow and content evidence of increased revenue due to increased influx of clients.																			
Timing and Logistics:	<table border="0"> <thead> <tr> <th>Event</th> <th>Date/Time</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>WS</td> <td></td> <td>C. County Health Department Conference Room</td> </tr> <tr> <td><u>Planning</u></td> <td>Aug.1st +</td> <td></td> </tr> <tr> <td><u>Conduct:</u></td> <td>9-5, Oct. 27; 8-11:30, Oct. 28</td> <td></td> </tr> <tr> <td><u>Followup:</u></td> <td>30 days post WS</td> <td></td> </tr> <tr> <td><u>Sustain Improvements:</u></td> <td colspan="2">Track one measure: goal of 2.5 client hour through the clinic. Two time studies have been completed complete time studies monthly following the WS.</td> </tr> </tbody> </table>		Event	Date/Time	Location	WS		C. County Health Department Conference Room	<u>Planning</u>	Aug.1 st +		<u>Conduct:</u>	9-5, Oct. 27; 8-11:30, Oct. 28		<u>Followup:</u>	30 days post WS		<u>Sustain Improvements:</u>	Track one measure: goal of 2.5 client hour through the clinic. Two time studies have been completed complete time studies monthly following the WS.	
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A WORKSHOP CHARTER

	Consideration	Yes (Y) or No (N)	
		1-day	4-day
❖ Scope	• Is the problem small or well understood where future state could be solved in a day?	<input type="checkbox"/>	
	• Will the future state involve merging multiple current states or have implications on multiple processes / sub-processes?		<input type="checkbox"/>
	• Is structured problem solving required due to multiple solution options from multiple stakeholder groups and/or same stakeholder groups from multiple locations?		<input type="checkbox"/>
❖ Implementation	• Can a “few” people implement the entire solution within a week without much stakeholder management and/or pushback?	<input type="checkbox"/>	
	• Will implementation involve multiple stakeholders with multiple action plan owners?		<input type="checkbox"/>
	• Will piloting, refinement, and/or standardizing processes be required?		<input type="checkbox"/>
❖ Sustainability	• Are metrics already in place and/or readily available?	<input type="checkbox"/>	
	• Will the implementation require defining metrics, creating a visual board, and/or performance huddles to ensure the actions are sustained?		<input type="checkbox"/>

TOOL: TO DECIDE HOW LONG AN RPI CAN BE



5. Improve:
Workflow
coming in

- a. Data about the amount of work
- b. Kinds of work coming in
- c. Different points of entry
- d. Appoint a gatekeeper

What's different?

- Gatekeeper- segregate the work up front



EX. HOW TO 'SORT' INCOMING WORK!



6. Improve:
Workflow going
through

- a. Minimize batching
- b. Balancing the workload
- c. Kanban
- d. Push/Pull
- e. Error-proofing

What's different?

- Challenges of takt time



EX. OF ALTERNATIVES TO TAKT TIME. WHITEBOARD SHOWS DAILY WORK SCHEDULES.



- a. Research industry benchmarks
- b. Standardization

What's different?

- Getting to best practices

MAIN TASKS



Best practices in each branch

TEAM MEMBERS PUT THEIR BEST PRACTICES ON POST-ITS FOR EACH ACTIVITY



8. Improve: Process supports

- a. Materials
- b. Equipment
- c. Physical Environment
- d. Organizational Culture

What's different?

- People 'miss' the organization culture

Process supports-MATERIALS



EX. OF MATERIALS, FORMS. 39 DIFFERENT FORMS USED!

PROCESS SUPPORTS-Environment/Culture

Lean requires cultural transformation.

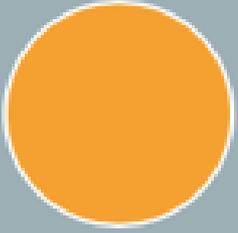
“Lean strategies fail as a result of not recognizing this key element of success.”

Cul·ture -tured, -turing
[kuhl·cher
noun, verb

The shared values and practices of everyday existence that characterize people and organizations.

CULTURE: Employee empowerment is the cornerstone of continuous improvement.





9. Pause:

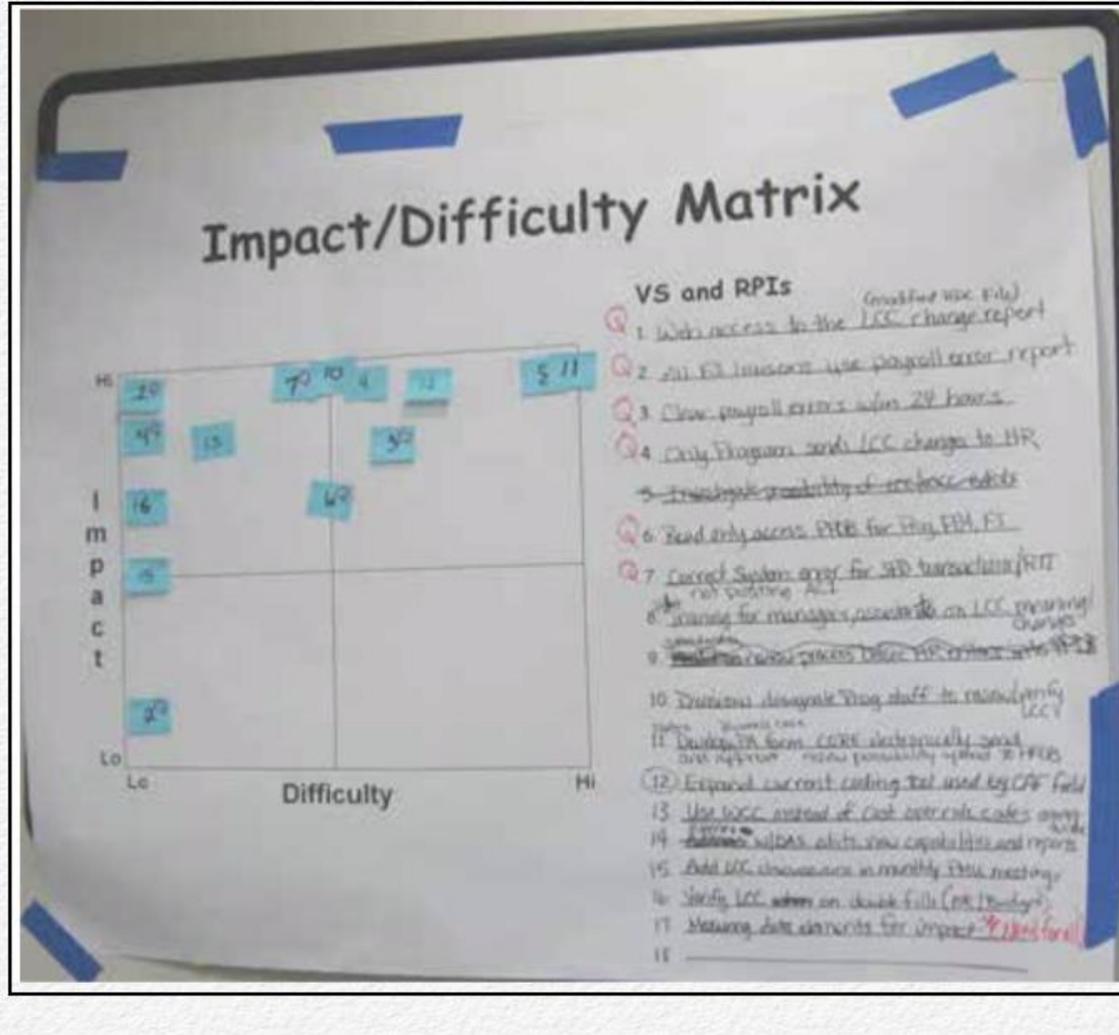
'Land this
747!'

- a. Develop the improvement recommendations
- b. Implementation plan

What's different?

- PDSA forms: Impact/Difficulty Matrix

EXAMPLE: Financial Services RPI Matrix



THIS MATRIX IS USED TO CATEGORIZE DIFFERENT IMPROVEMENT RECOMMENDATIONS

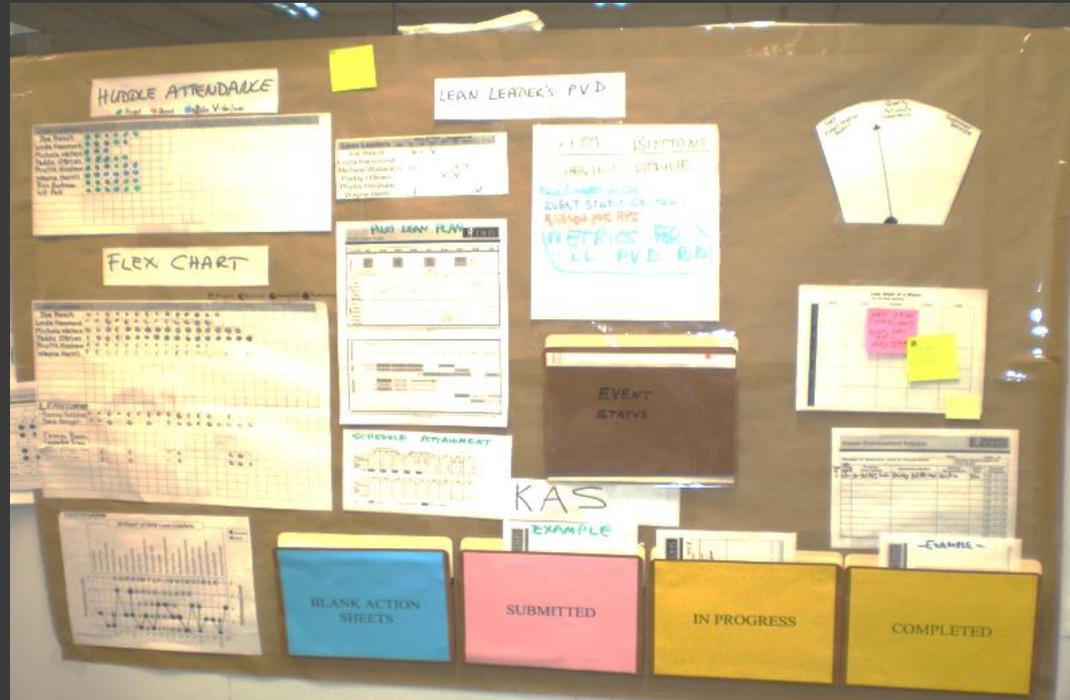


- a. Team members prepped
- b. Oral presentation
- c. Continuous improvement program

What's different?

- Example of a daily management system

CONTINUOUS IMPROVEMENT



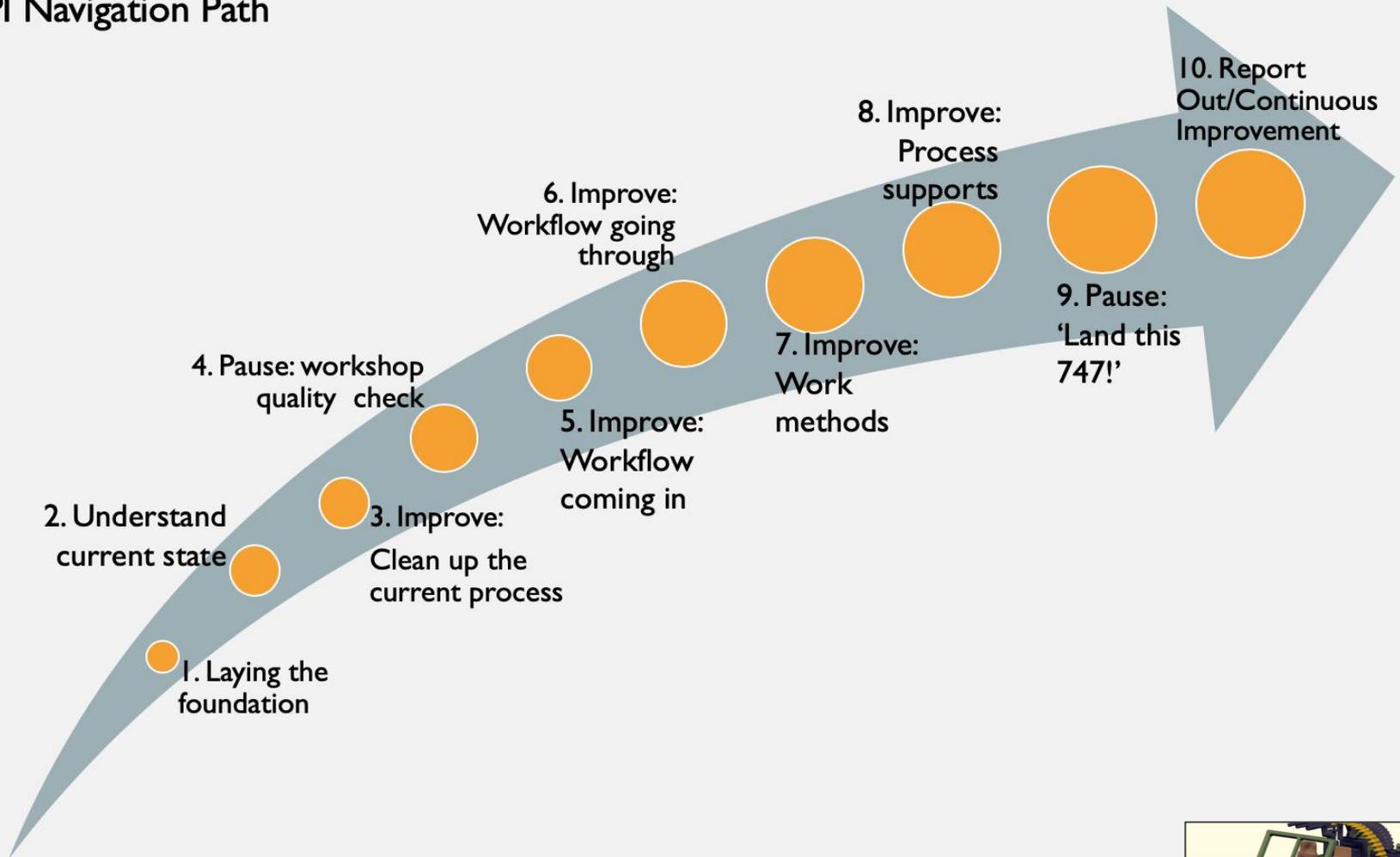
EX. PERFORMANCE BOARD FROM A DAILY MANAGEMENT SYSTEM

WHAT'S GOING ON IN MY FACILITATION MIND?

- Do I know the critical junctures/decision places in the workshop?
- Do I know when to pull back the team when they need to do more work?
- Do I know when tasks are too big for the group and need to make mini-teams?
- As the workshop progresses, am I able to start writing the final report 'in my head' ?



RPI Navigation Path



Thank you!

Sheilah Paddy O'Brien, Lean Coach

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- Linked-In: <https://www.linkedin.com/in/sheilahpaddy-obrien-3a03a8ba>
- Book, Lean for the Nonprofit can be ordered from https://inkwater.com/books/index.php?route=product/product&product_id=1450