## Tazewell County Health Division

## What takes more time the Inspection or the Admin tasks? Food Inspection Process Kaizen Event March 17-21, 2014

### **Our Starting Point**

We complete over 2,000 food establishment inspections a year. There is more time spent on the administration pieces of the food inspection process than necessary within the food program. Excluding the inspection time, current food inspection administrative time is 7 hours per inspection, totaling to ~120 hours per week of staff time.

### Vision

The value added steps in the Food Establishment process are enhanced by stream lining the administrative tasks and material costs used by the Inspectors and Supervisor.

### Immediate Improvements

- Reduce time to create inspection schedule
- Streamline the previous inspection summary report
- E-mail the inspection schedule
- Electronic HACCP check list
- Email inspection report to facilities
- Standard drop down codes in Garrison
- No more printing during the inspection
- Reduced copies of Repeat Critical (3 to 2)
- No reports to Cube Farm
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#### Forthcoming Improvements

- New tablets for inspectors
- 99% + inspections are completed on line
- Electronic signature

#### **Potential Results**

Minutes / inspection							
	Current	Future	Savings		Hou	rs / Yr	
Step 1: Food Inspection							Detential
Schedule Step 2: Prepare for	183	133	50	Current	Future	Goal	Potential Savings
Inspection Step 3: Inspection	26	18	8	6,743	2,591	33%	62%
(ex PIC interaction)		42	39	0,110			0
Step 4: Complete paperwork	57	12	45		Material	Costs / Y	′r
Step 5: Supervisor Follow up	71	18	53				Detential
Step 6: Filing the inspection reports	1	1	-	Current	Future	Goal	Potential Savings
Total in minutes:	418.6	224.1	194.6				
Total in hours:	7.0	3.7	3.2	\$ 870.34	\$ 2.72	2 50%	99.7%

## Our approach ... kaizen



A group of methods for making work process improvement. Planned team event conducted in the workplace systemically uncovering waste in a work process and eliminate it in rapid fashion

## What is Continual Quality Improvement?

Achieving sustainable performance beyond what is thought possible by unlocking the limitless capacity of an organization's most valued resource – its people

Through the identification of focused improvement areas, elimination of non-value added work through the use of improvement methods to diagnosis and solve problems, test solutions, measure results, learn, and install sustainable change

## <u>Value Is</u>

- **Anything that**
- a. the customer recognizes as valuable and is willing to pay for, AND
- **b.** Changes the product or information, AND
- c. Is done right the first time.

### <u>Waste Is</u>

Anything that consumes resources without adding value

## Waste Presents Itself in Different Forms

- 1. Moving
- 2. Stopping
- 3. Searching
- 4. Inspecting
- 5. Getting Ready
- 6. Things Gone Wrong
- 7. More Than Needed
- 8. Not Needed

## Day 1

Day 1 Newspaper: Focus the Team: V. Introduce team members & their roles of the Team Kaizen and Working with Others Overview V. Review Daily Newspaper and Day | Goal · Confirm goal; Understand & Validate starting point, Scope & Goals; Firm up Measures Gather process data + information: Mse process map to understand the current process · Walk the process to validate The current process · Incorporate input provided prior to and during · Gather Waste/Issues Communicate Progress

## Our Goal

TO: Reduce the costs associated with the administrative work steps of the food inspection process.

FOR:

- Food program staff (9 environmental health staff)
- Health Department Administration (Budget) ٠
- **Tazewell County Food Facility Managers**

SO THAT:

• There is a reduction of the overall time associated with running the food program allowing time for inspectors to complete all food inspections with limited resources along with the other EH work that they are assigned; thus saving costs spent on the food program

• There is a reduction in the material/paper supplies used in the food program thus saving costs spent on the food program.

 The food facility managers receive a food inspection that is consistent regardless of which food inspector performs the process.

CONDITIONS: The quality of steps 2, 4, and 8 of food inspection itself is not negatively

impacted **STANDARDS**:

Impacted						
STANDARDS:	Beneficiaries	What Measured	How Measured	Target		
OTANDARDO.				How Much	By When	
	Staff	Administrative time	Time it takes to complete a food inspection minus the inspection itself	33% reduction in administrative time	By the end of the Kaizen project	
© 2014 Continual Impact L	Health Department Administration	Materials saved	Amount of materials for each food inspections	50% reduction in material use	By the end of the Kaizen project	

## Our Team



### **Our Food Inspections**

# Inspections 2014 2013 Be-oinspections 81 337 209 -Cat 1 3 Routine 110 -Cat 658 138 423 Beg Yol=4284 ol = 715 Citical

# Focusing the Team



**Remember the** koosh ball exercise?



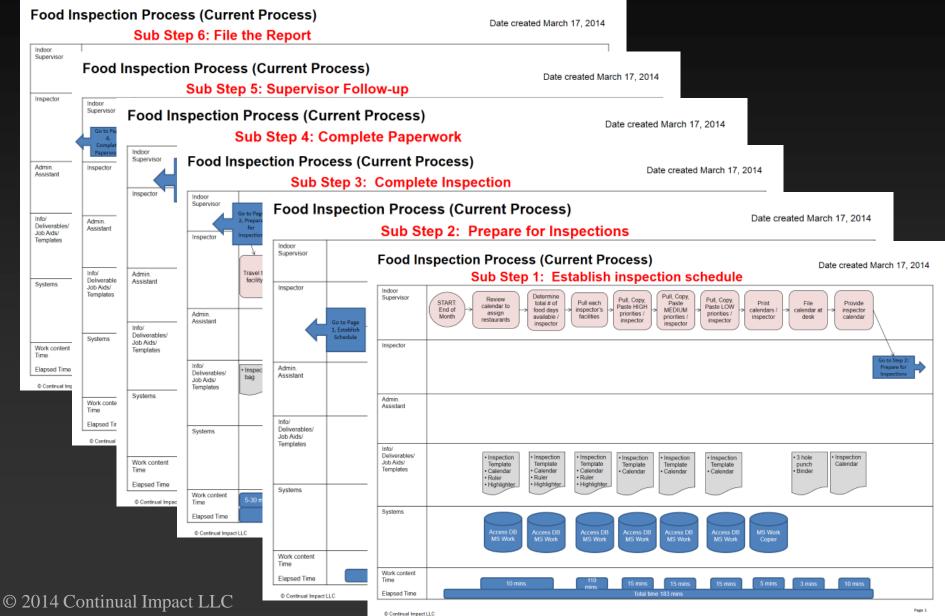
# Capturing our current process

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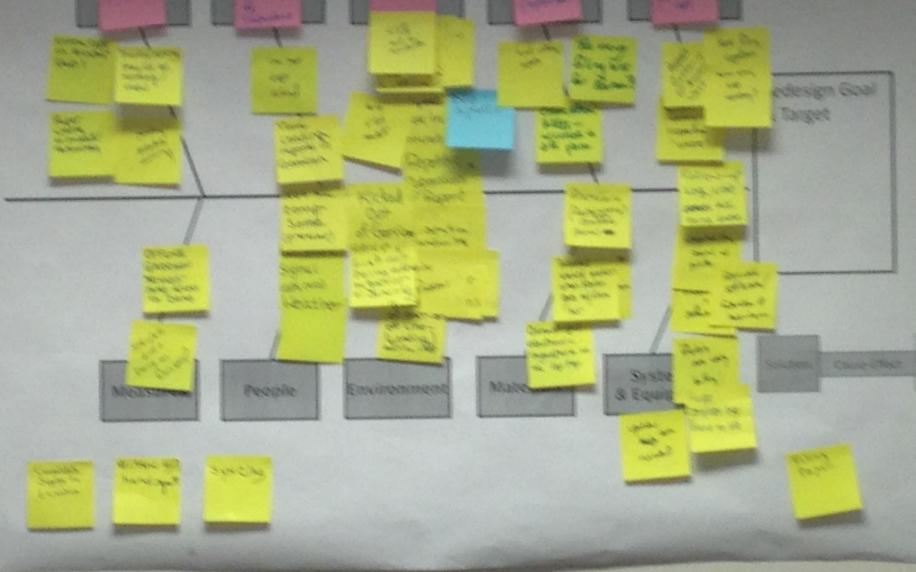
## **Our Current Process**



# Current Process Waste

is done right the first time. The 8 Forms of Waste Turning in Transferi S Kauen Notes Inspections a reputs for MOVING to their 1340.0 marrison Waiting Any de Nahna Printer Sewrit for STOPPING Wai I. March Managers Dek Looking for Reinfipection Locating something or Driviter Carbiad to do wo SEARCHING Lipsa Materials · People · 4 4100Nol Sunte S intals INSPECTING Checking to ensure w Amual Re Inspect Audit Report Critical Letters GETTING Ac Trinting to do work READY riging over . Tearing down THINGS Any u GONE b Technology WRONG acility ons, or exp How Changes Hours /Day BY MORE THAN NEEDED eriHACC nor inspection 0 rea Checklist NOT enceduling necessary to provide value to the customer. NEEDED Gamison makes multiple ion (or information processing) or Product Feature Copies. -

# Capturing Issues



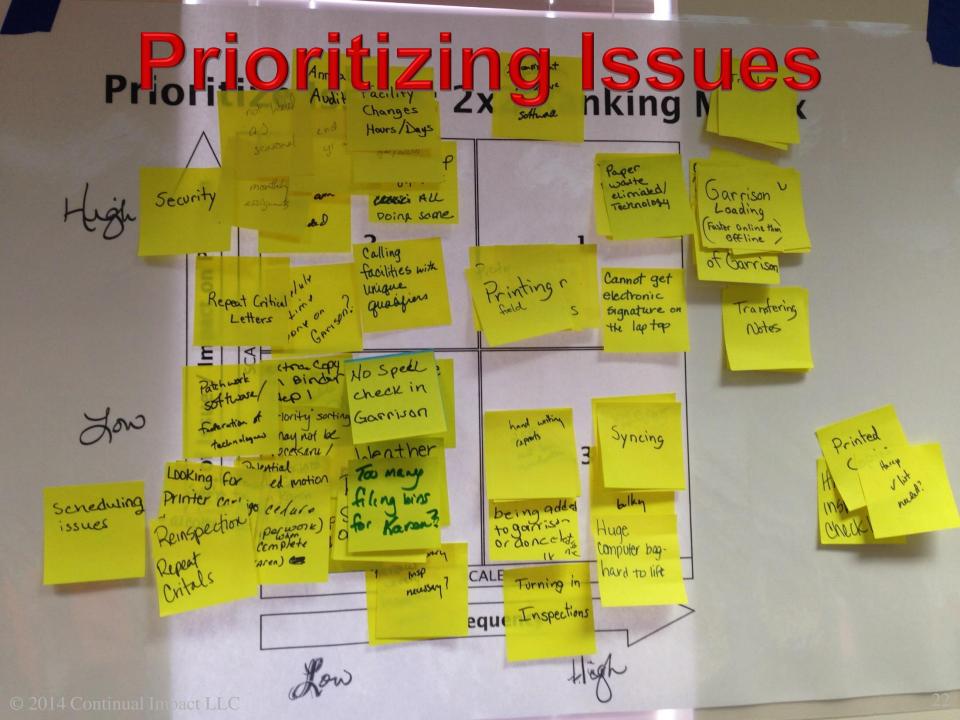
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# Lots of potential!





Dayd Newspaper: voorernight Thoughts Complete understanding the current state - Process observations - Update the process map(s) - Capture Wastes + issues L'Evaluation (cause + effect analysis) Begin indentifying solutions Preview Parking lot items 6 Communicate progress

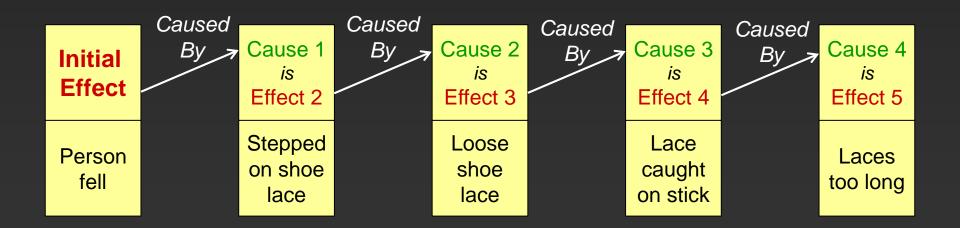


# Getting to the root of issues



## The 5 Why's Approach

- What: Simple technique for root causing an issue by asking "Why?" at least 5 times.
- Why: Asking why a least 5 times increases the probability of getting past symptoms and understanding the root of the problem.

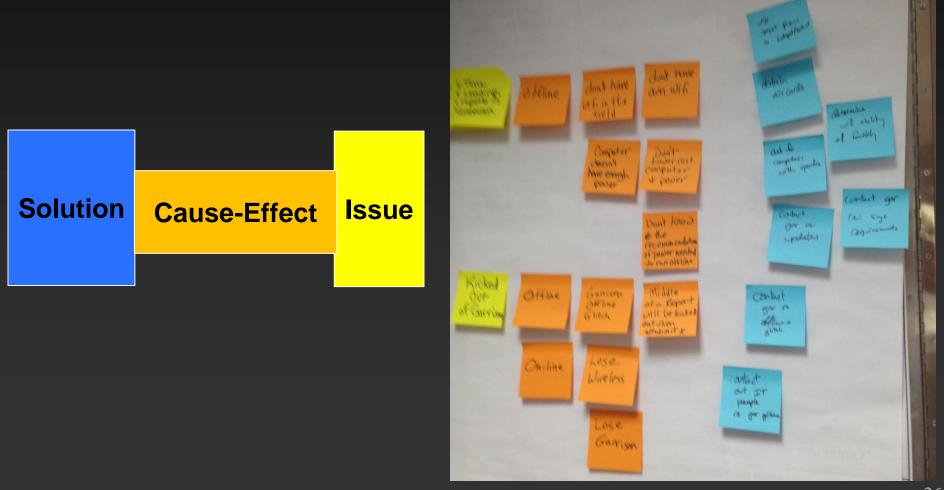


# Why? Why? Why? Why? Why?



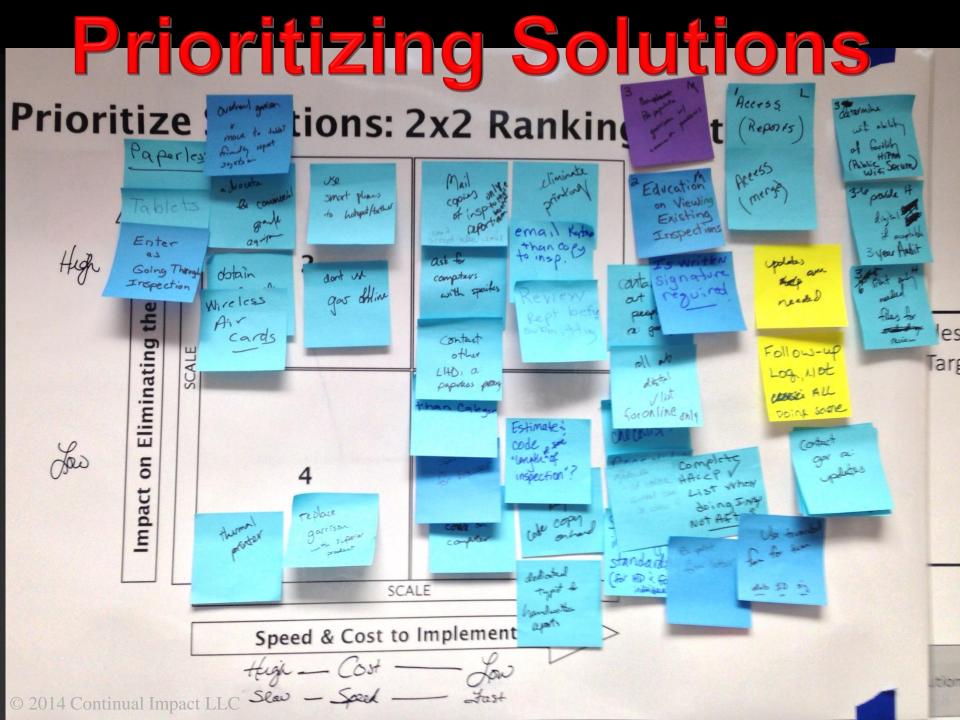


# More Root Cause Analysis



# Deep thinking...

Steps Inspection



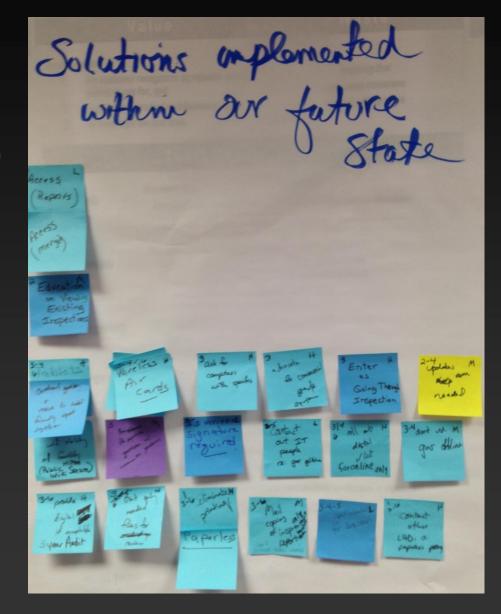
## **Improvement Hypothesis**

Issue	Improvement	Expected Results
Too much paper	<ul> <li>Eliminate paper printouts by</li> <li>enabling inspection reports online</li> <li>electronic signature</li> <li>digital HACCP check list</li> <li>Only print out reports for the 3 year audit</li> </ul>	<ul> <li>Decrease in paper costs, paper management</li> <li>Food establishments sign inspection report electronically</li> <li>Food establishments accept mailed inspection report (email or paper mailed later)</li> <li>Decrease amount of filing</li> </ul>
Garrison performance (offline & online)	Enable inspectors to always have Garrison on-line access Provide inspectors hand held device to use during the inspection Predefined options available on Garrison	<ul> <li>Eliminate online issues</li> <li>Eliminate offline use</li> <li>Eliminate syncing</li> <li>Decrease typing up hand written report</li> <li>Access to most current facility information, other pertinent EH data</li> <li>Inspection is recorded as the inspection occurs</li> <li>Decrease write up time of inspection report</li> </ul>
Printers do not perform as needed	Eliminate on-site inspection printing	<ul> <li>Decreased material costs</li> <li>Printer issues eliminated</li> <li>Email report to facilities</li> <li>Decrease amount of filing</li> </ul>

Day 3

Day 3 Newspaper Overnight Thoughts Confirm Solutions will achieve the goal Develop the future state process Mapp + validate the future state Beg in Developing Solutions Communicate Progress

# Solutions will meet the goal **33%** time



## Designing the future

Process Furnice State

Sup Established 1 Stop 2 Rear Baper Solar

Stop 2 Born Prome First

PROLETS

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# Assigning solution development tasks





Day 4 Newspaper - Overnight Thoughts - How do we make this process "bullet proof" - Work on developing solutions - EST / Learn Modify - Develop Training • Process Owner Training - Communicate

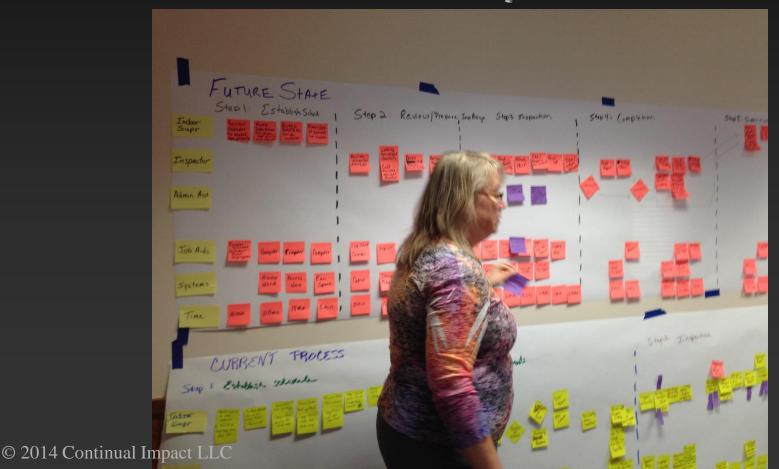
### Issue we solved



I ssues We have solved within the future state.



Validating our future process Have we addressed our Issues? Have we incorporated our Solutions? Have we eliminated Wastes? Is it bullet proof?





# Testing the tablet during an inspection

### **Testing the Process**

Tests	How	When	Who	Successful if
1.Test proposed technology (tablet, air card, laptop, signature, Garrison)	In the field, during an inspection	Thurs.	Katie and Kim	Able to use online Garrison in the field to complete the inspection form and attach the HACCP checklist.
2. Test existing laptop with air card to see if we can capture electronic signatures in order to be paperless.	In the field, during an inspection		Kim	Able to use online Garrison Able to capture elec. Signature Able to email inspection report
<ol> <li>Test the Inspection Drop down boxes in Garrison as if we were doing an inspection.</li> </ol>	Down in EH Conference room with another inspector	Thurs.	Emily	Drop down boxes address >= 80% of codes
4.Test the process for viewing reports in Garrison with an inspector.	In the CR, In Training	Thurs, Fri	Emily	All inspectors use this report
5. Test the process of attaching the HACCP report to the Inspection Report	In Training	Fri	All Inspectors	All inspectors can attach report

### What have we learned from the tests?

Reasons	Learning: Why?	Direction: Actions to be taken
Air card worked	Disconnected from network when tried to install on own	Jim needs to install
Signature Works	It is hard to do with stylist with this computer	Worked with the finger, maybe hold the button down for the customer while they sign.
Report emailed	Signature did not show up on their copy; if they do not have outlook express they could not open the attachment; internet capability of the facilities may be an issue.	Verify that inspectors know how to PDF and their system can PDF; Transmit it as a PDF
HACCP form	Was not user friendly	Has been fixed and tested no action necessary.
Drop down boxes	General statements so still had to type in comments but they are shorter	Add the green "x" box into the training
Was able to access the code and get online		
Worried about dropping the tablet		Wanting to make the tablet more secure
Formatting issues with Garrison and the tablet. Curser would move unexpectedly	Entering data it got bigger Location would jump across the screen.	Contact Garrison about hardware and software interfacing issues Verify that our system can run Garrison without glitches
Typing lag. Did not initially know what the code was	Made typing slower because of waiting for it to load To look up the code on garrison was not the easiest and it took a lot of time	Verify that our hardware does not have that lag Scanned document of the Code short cut sheet
Wasn't able to enter the information all at once using the touch screen so needed to go back and use the blue tooth Date was small Predefined dropdown comments were duplicated at times.	This added time on the end of the inspection due to having to type in additional information Sometimes clicked the wrong date Had to go back and delete extra copy.	Possible talk to text later so insure our technology has a microphone.

# Hmm...ls the ASUS the best tablet for us

Steple File HeReport

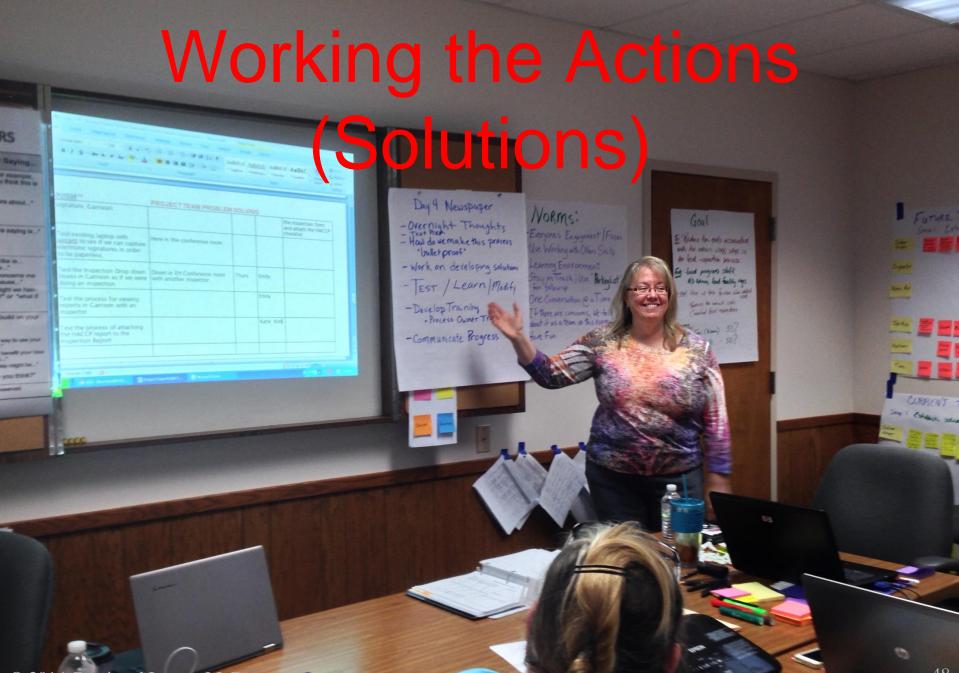
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Step 4: Compley

### Creating the solutions

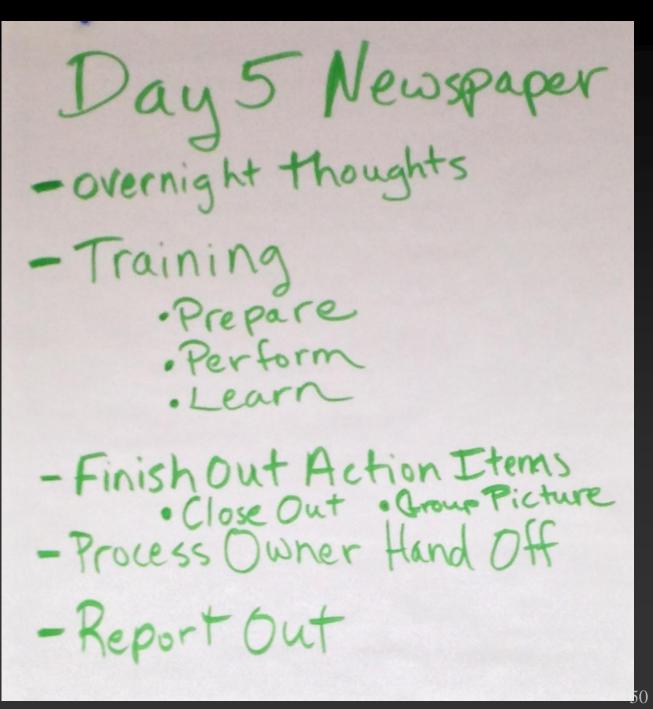






### Creating the Training Plan

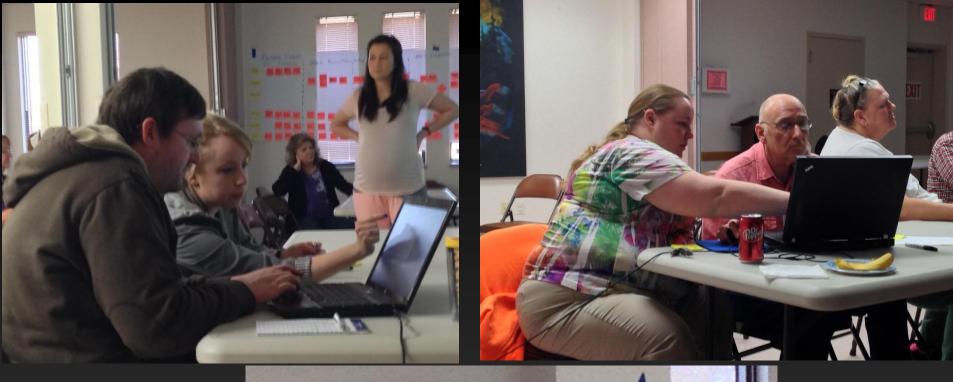
Day 5



### Training on the new process





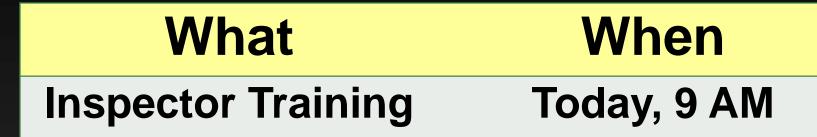


#### Immediate Improvements

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- -No Reports to Cube Farm



### Next steps / What to expect



### Go-Live Monday, March 24<sup>th</sup>

#### Define, Purchase, Prepare & Deploy new tablets

#### April

### **Potential Results**

"Kaizen shocked us, we thought that we were going to spend a week to remove 10 minutes."...instead we identified how to remove 190 minutes.

Hours / Yr						
Current	Future	Goal	Potential Savings			
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	Material Costs / Yr					
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