

KAIZEN = RAPID CHANGE FOR THE BETTER

WHAT IS THE KAIZEN METHODOLOGY

AND WHAT CAN IT DO

FOR MY HEALTH DEPARTMENT?

SESSION GOAL



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TO:	<p>What is the goal, purpose or outcome desired? Share the kaizen process for achieving rapid results</p>	
FOR:	<p>Who benefits from the results? What is the scope? Session participants</p>	
<p>BY:</p> <p>How will you achieve the result?</p> <p>Basic approach?</p>	<p>Intro & program background (5)</p> <p>Kaizen process (15)</p> <p>Event experience & results (15)</p> <p>Benefits of kaizen (10)</p> <p>Getting started (5)</p> <p>Questions & Answers (10)</p>	<p>Liljana Johnson</p> <p>Chris Bujak, Pam Vecellio</p> <p>Olivia Bryon-Cooper, Debra Whiteman</p> <p>Olivia Bryon-Cooper, Debra Whiteman</p> <p>Chris Bujak, Pam Vecellio</p> <p>All</p>
SO THAT:	<p>What are the benefits from achieving the goal? Attendees understand the power of using kaizen in making improvement in their agency or organization</p>	

COPPHI Kaizen Event Program

Kaizen Community



Program Partners

- Managed by NNPHI
- Training & expertise by Continual Impact
- Funded by Robert Wood Johnson Foundation

Purpose

The objective is to **promote rapid** and **measurable improvements** in public health **work processes** and **outcomes**.

Program Participation

NNPHI provided 10 STLT health departments with

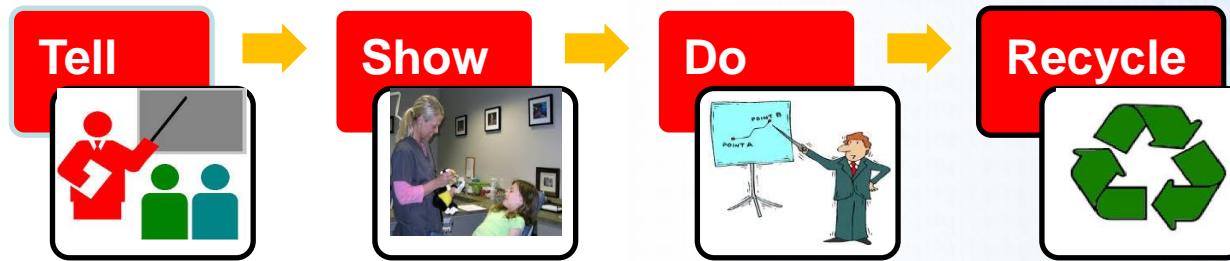
- QI & “kaizen event” **training**
- A personal QI **coach**
- **Onsite** coaching and **co-leading** kaizen event at the health department

COPPHI Kaizen Program: Objectives



- ✓ Achieve a measurable benefit in each work process in rapid fashion. Show the organization that you can **make change in a short period of time**.
- ✓ **Build knowledge and skills in a QI Leader** that enable their personal QI growth and ability to support the organization.
- ✓ Involve team members and build excitement for **additional improvement**.
- ✓ Demonstrate an **approach** that the organization **can use in the future** for additional QI Projects.
- ✓ Assist the organization to meet the accreditation standards and measures set by the Public Health Accreditation Board (**PHAB**).

COPPHI Kaizen Program: Training



November and December 2013 – 6 days total

- **Introduction to Improvement: Seeing the Possible** (Overview of improvement with hands on simulation of running an organization, seeing the changes that are possible and receiving a basic understanding of QI techniques.)
- **Foundational QI Skills** (Working with Others, Waste identification, Goal setting, Measurement. Gathering Practical Knowledge, Lessons learned)
- **Process Mapping** (Value Stream, Sub-Process, Waste & Value Analysis)
- **Effective Problem Solving and Solution Implementation** (Cause and effect analysis, 5 Whys)
- **Kaizen Event Skills & Process** (Kaizen Process & techniques, Change Management, facilitation)

COPPHI Kaizen Program: Coaching


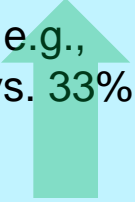



- Established Kaizen Community of Practitioners
- Tell / Show / Do / Recycle learning framework
- One-on-One Coaching (distance)
- One-on-One Coaching (on-site); Completed 10 kaizen events in 10 weeks, co-led with on-site coach

COPPHI Kaizen Program: Application

Process/ QI Project Focus	Health Department	QI Leader
Requisition process	Seminole Department of Health, FL	Sara Warren, Udgit Mehta
Child developmental screenings	Fond du Lac County Health Department, WI	Kay Lock
Supply order process	Johnson County Department of Health and Environment, KS	Debra Whiteman
Childcare facility inspections	Washington County Public Health Division, OR	Erin Mowlds
Shared drive usage	Three Rivers District Health Department, KY	April Harris
Increasing client feedback	Clackamas County Public Health Division, OR	Philip Mason
Phone management	El Dorado County Health and Human Services Agency, CA	Olivia Byron-Cooper
STI reporting	Chicago Department of Public Health, IL	Kirsti Bocskay
Decrease administrative costs for food inspections	Tazewell County Health Department, IL	Karla Burress
Issuing death certificates	DeKalb County Board of Health, GA	Dianne McWethy, Susan Floyd

COPPHI Kaizen Program: Accomplishments

What	How	Results
Training		
<ul style="list-style-type: none"> •Event Leaders; Foundational skills, Kaizen skills •Event Members; Kaizen application 	<ul style="list-style-type: none"> •Training exercises, Training surveys, Coach feedback •Post event surveys 	<p>E.g., 3.2 pt avg increase on 7 pt scale</p> 
Application		
<ul style="list-style-type: none"> •Events conducted •Meet/exceed goal •Future events identified 	<ul style="list-style-type: none"> • # sites “Go live” • Actual data compared to measures set • # events planned 	<ul style="list-style-type: none"> • Ten, 5-day events conducted and went live • Measurement in progress; e.g., 80% cycle time reduction vs. 33% target • New events targeted 
Sharing		
	<ul style="list-style-type: none"> • Presentations • # Actions from learnings • # PHQIX submissions 	<ul style="list-style-type: none"> • Open Forum sessions, roundtables, poster, community calls and meeting • Event lessons learned; PrISM storyboard • 10 PHQIX submissions underway 

What is Kaizen?

kai

改

“change”



zen

善

“good”



“Change for the Better”

Kaizen as a...

- Principle of Conduct: Striving for Perfection
- Management Principle: Creates Business Success
- Method: Work Process Improvement
 - Individual Work Process Improvement
 - Day to Day Team Work Process Improvement
 - **Special Event Work Process Improvement**

**The pursuit
of perfection
in all one
does.**

Kaizen Method: *Special Event* Work Process Improvement

Kaizen event

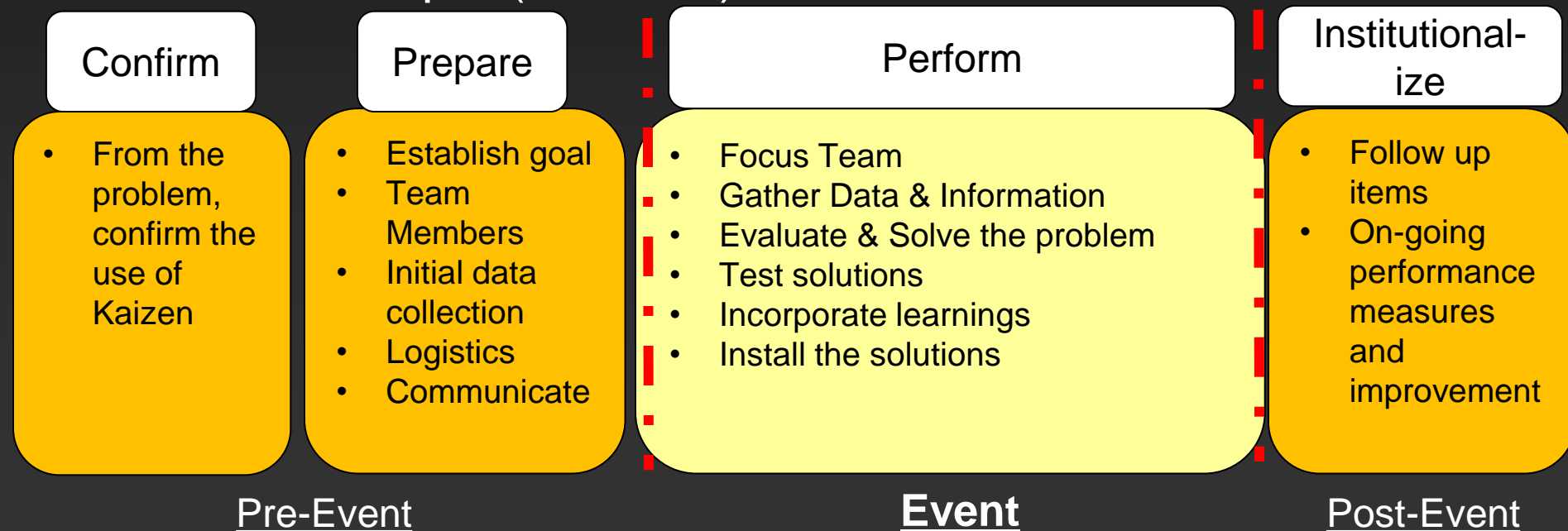
Following the selection of a kaizen appropriate process to improve, a typical kaizen event targets the elimination of waste in a work process by the team stepping through **all phases of the improvement cycle** in a concentrated and systematic approach including—all of this is accomplished in a brief period of time, **typically 5 consecutive days.**

The Improvement Cycle & A Kaizen Event

Improvement Cycle: (6-8 months)



Kaizen Event Steps: (6 weeks)



The Improvement Cycle & A Kaizen Event

Similarities

Completing all the improvement cycle steps

Team members are critical

Information & data based problem solving

Differences for a Kaizen Event

Shorter cycle time to achieve results

Less work content time for project

Target running the new process the day after the event

More critical:

- Preparation work
- Speed of Observing/Evaluating Data, Testing, Making Decisions, & Implementing Actions

Event leader's competency in multiple improvement methods

Confirm use of Kaizen

What

- Draft the project gap (starting point & vision)
- Draft the project goal statement
- Confirm kaizen as the best improvement method
- Obtain leadership support

Why

- Ensure the best improvement method to address the gap
- The improvement project is off to a successful start

Prepare for Kaizen

What

- Finalize event goal
- Confirm team members & subject matter experts
- Confirm improvement owner
- Gather & review relevant work process data, documents, issues
- Prepare & share event communications
- Coordinate event logistics & room set up

Why

- Confirm that team members, leaders, and QI Leader are prepared to fully participate

Perform the Kaizen Event: Typical Days in the Life

Day 1: Focus the team; Gather process data & information;
Understand the current state

Day 2: Prioritize issues; Evaluate/Root cause the wastes
and Solve the Problem

Day 3: Develop future state process & solutions (job aids);
Start to Test & Learn

Day 4: Test & Learn; Continue to develop solutions;
Develop training material; Prepare process owner

Day 5: Pilot the new process & Learn; Measure results;
Communicate results; Hand off to Process Owner & team

Institutionalize the Results

What: Post the Event

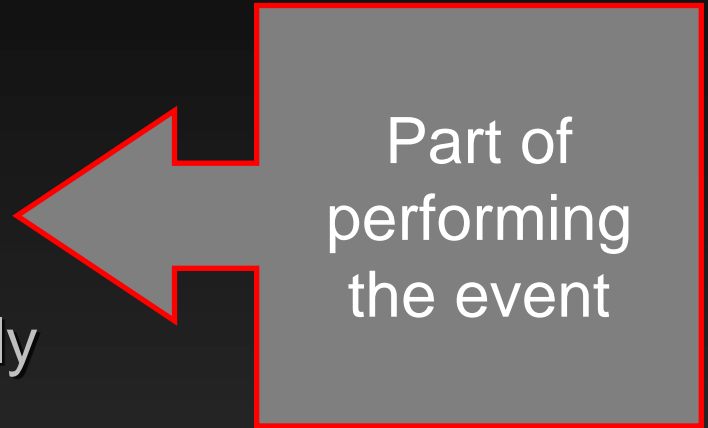
- Complete Follow-up action items (communications, training, go-live)
- Transition responsibilities from project team to process owner and process team members
- Share success; Replicate improvements at other sites, locations

Why:

- Ensure Work process improvements are fully institutionalized

Institutionalize the Results

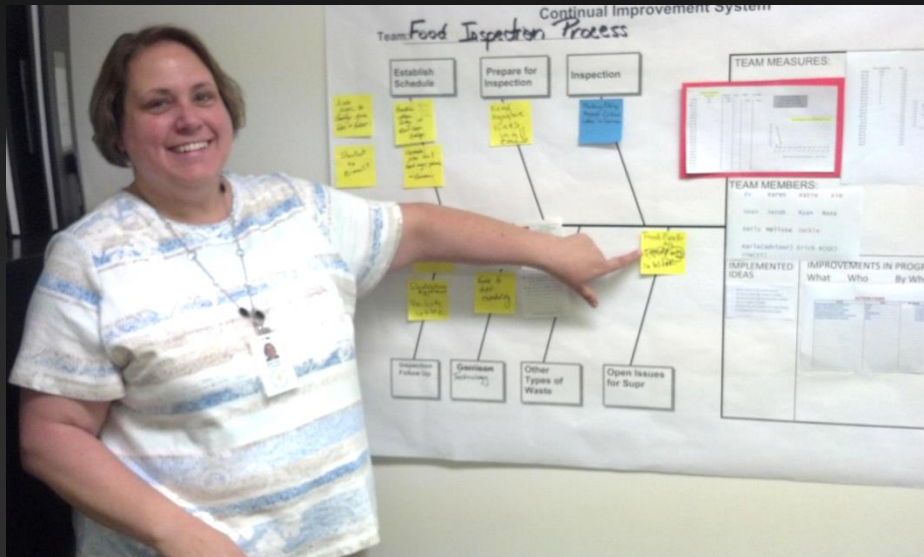
1. Create a process that is reliable, standardized and with clear accountabilities
2. Teach the new process effectively (Show, Do, Recycle)
3. Define and operationalize measures and targets; track performance
4. Create a feedback mechanism for questions and ideas; resolve problems and incrementally improve
5. Coach Performance; feedback and consequences



See NACCHO Self Assessment Tool; Sub Element 6.7, Process Management, Results and Continual Improvement

Continual Improvement

- Create a feedback mechanism for questions and ideas; resolve problems and incrementally improve



Process Owner holds a CIS meeting to find out how implementation has gone thus far. She later states, **“I couldn’t have done standardization of this process without kaizen.”** 2 weeks following process implementation

- Identify issues and ideas on an ongoing basis
- Create a local problem solving system including escalation if necessary
- Routinely review process performance

People are Important!

“People are the heart, head and muscle of the high performing organization—who they are determines whether it exists or fails to exist”

Vital Enterprises, The High Performing Learning Organization, Aug 1997



Giving them the opportunity, setting, process and skills are foundations to success...

Kaizen Helps!

The types of activities which people consistently report most rewarding—**involve a clear objective, a need for concentration so intense that no attention is left over, lack of interruptions and distractions, clear and immediate feedback on progress toward the objective, and a sense of challenge**

*Psychologist Mihaly Csikszentmihalyi,
Univ of Chicago*



Powers and Glasser

Kaizen Event Feedback

- “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.”
- “Nothing has ever happened this quickly in the department before. We solved a 16 year old problem in 5 days.”
- “We’ve never been asked our opinion before, we’re just told what to do. I have much more capability than people realize but feel looked down on because I’m just an operator. ...Kaizen changed that!”
- “It is nice to see how proud people are and how they own these improvements and the new process.”
- “This kaizen event was a roller coaster, after I got off I’m ready to do it again!”
- “...the change that we are making to our organization to empower people, get them more involved in the day-to-day decision making, is going to get us better results”

Kaizen: Building the Culture of Quality and a High Performing Organizations

- ✓ Powered by **People**
- ✓ Special type of **Leadership**
- ✓ Superbly **Focused** on their purpose
- ✓ Use **Learning** to create results
- ✓ **Implement** well, installing the new way and continually improving
- ✓ Improvement **Methods** used to empower the individual and effectively solve problems

Kaizen Experience, Learnings, & Results

Olivia Byron-Cooper
Debra Whiteman

El Dorado County California – Hangin' On a Call Lookin' For a Live Body

Goal was to Increase customer satisfaction when calling Public Health and increase our efficiency and effectiveness in delivering information to customers over the phone.



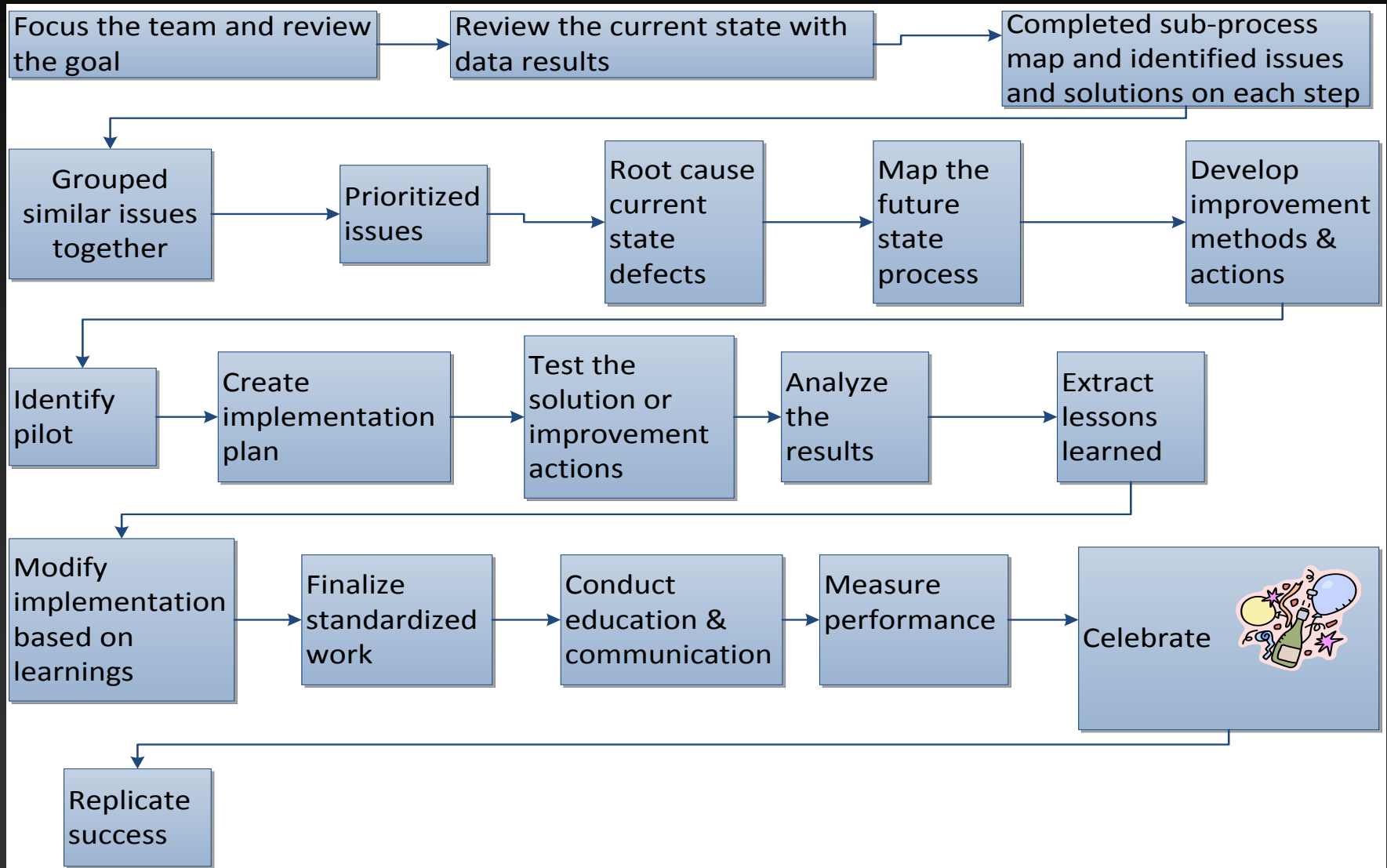
What Was Our Challenge?

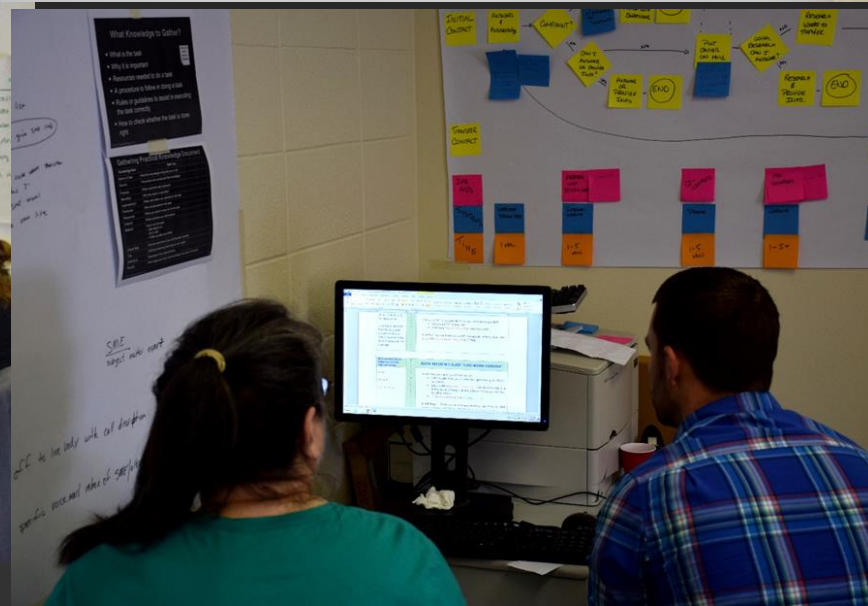
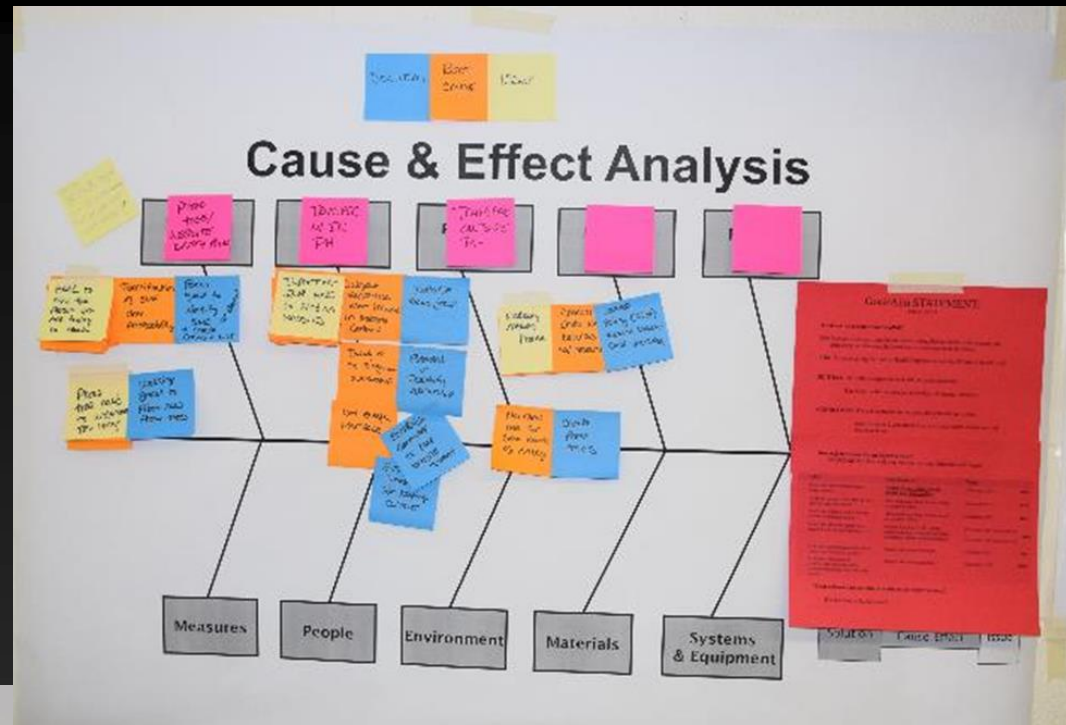
Stakeholder	Description	How did we know?
Customers	Get transferred multiple times often to recorded menu or number that is no longer in service. Often are unable to obtain information needed. Calls are often left unreturned.	pre test
Financial	Potential for lost clients Time taken for staff to find appropriate information = \$	anecdotal, complaint forms
Team	Asked to provide good customer service without appropriate materials to do so. Results in complaints and low morale	Anecdotal

Data to Support Perceived Challenge

- 73% of the time it took over 3 days to receive a return phone call
- 5% of respondents stated they received a return phone call the same day
- 62% of callers (that required transferring) experienced 3 or more transfers
- 11% of callers (that required transferring) reached appropriate SME after one transfer

Kaizen Process at a Glance

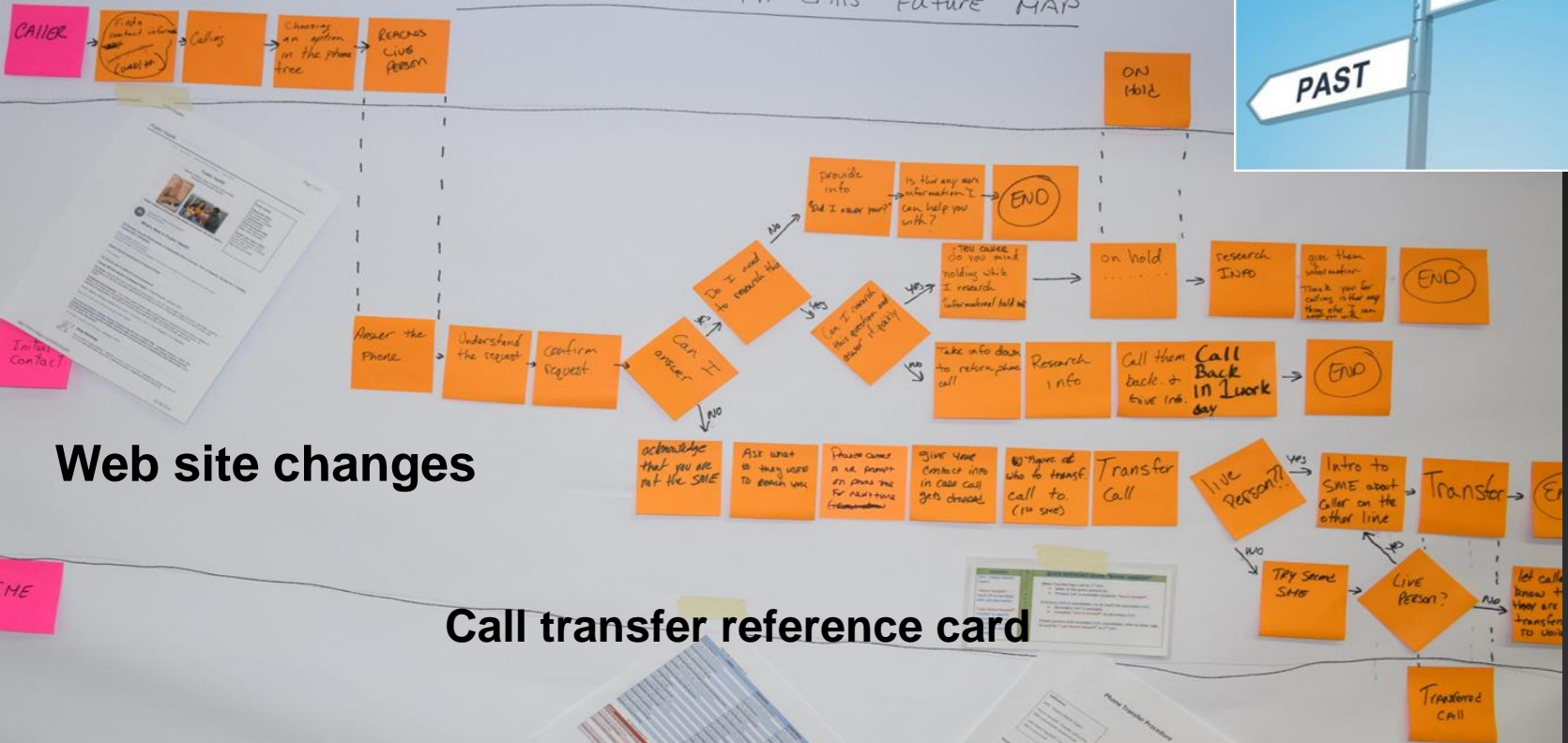




Solutions and Future State



RESPONDING TO PH CALLS FUTURE MAP



Web site changes

Call transfer reference card

SME look up lists

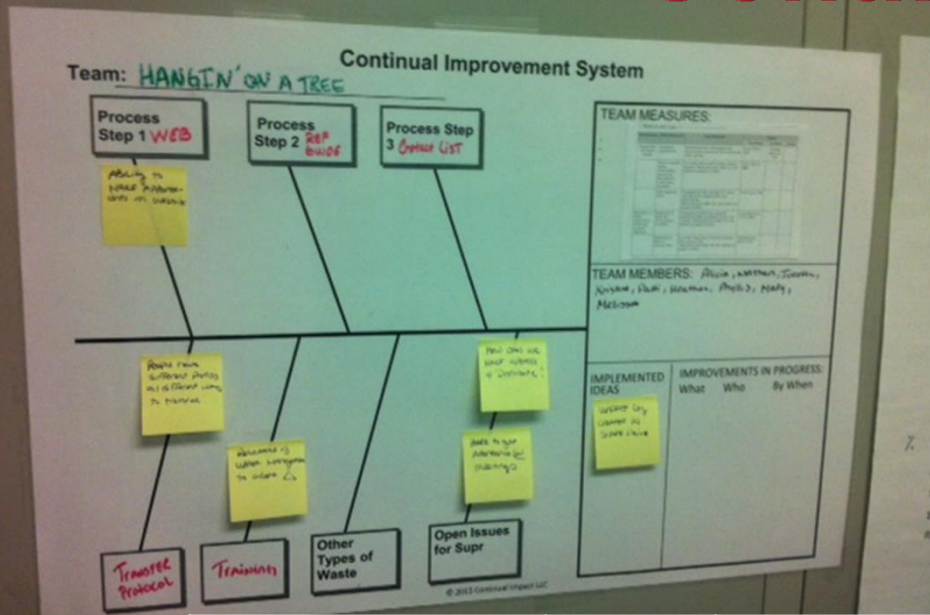
Standardized work

Testing Solutions on Customer



Type Information	Search Before	Search After
Health data	1:03.51(min:sec)	26.51 (sec)
Birth Certificate	25.98	7.48
Animal services	11.11	5.08
Stop Smoking	7.38	10.96
TB Test	1:55.36	7.50

Continual Improvement



	Before Kaizen	Goal	May 7	May 14	May 21	May 28
% Warm Transfers	28%	50%	60%	65%	62%	63%
% calls returned in 1 day	5%	70%	100%	95%	98%	97%
% with 1 Transfer	11%	80%	70%	72%	73%	75%
% requiring > 3 minutes	30%	15%	12%	11%	12%	14%

Johnson County Department of Health & Environment Supply Ordering Process

The goal was to reduce the staff time spent and steps taken to process supply orders so that:

- more time can be spent on other responsibilities
- expectations are communicated clearly
- with a consistent process across the department.

What Was Our Challenge?

Stakeholder	Description	How do you know?
Customers	<ul style="list-style-type: none">• Internal customers submit orders in various ways	Assessment of Current Process
Financial	<ul style="list-style-type: none">• Excess use of staff time	Staff report Time studies
Your Team	<ul style="list-style-type: none">• Frustration with the current system• Inefficient use of staff time• Number of different forms to process• Inconsistency in the system across divisions and working with all staff	Staff report Time studies Assessment of tools

Our Goals & Results

- Labor Time Savings including clarification time
- Decrease # of orders by placing monthly batched orders
- Improved receiving (due to increased accuracy)
- Improved moral & LEAP (Leadership Empowers All People)
- Improved inventory management
- Item standardization
- Begin tracking accuracy (>90% target)

Step / Activity	Before Work Content Time (hrs/year)	After Work Content Time (hrs/year)
Identify need	105	13
Approve order	25	
Place Order	160	25
Document Order		13
Receive order	75	25
Reconcile order		38
Total	365	113
% Potential Improvement		69%

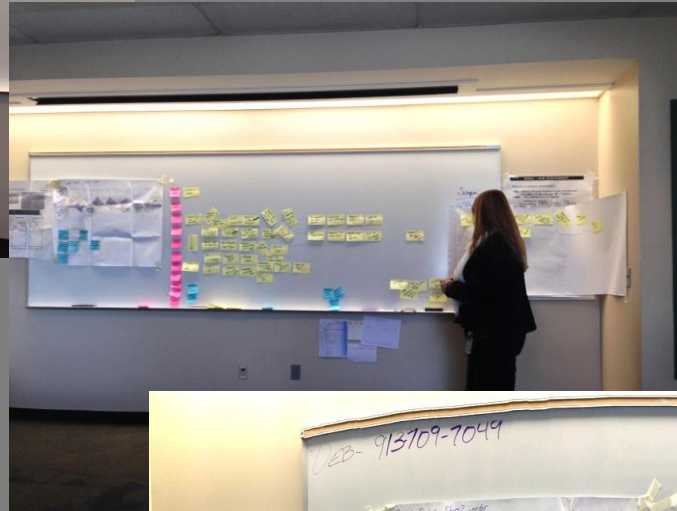
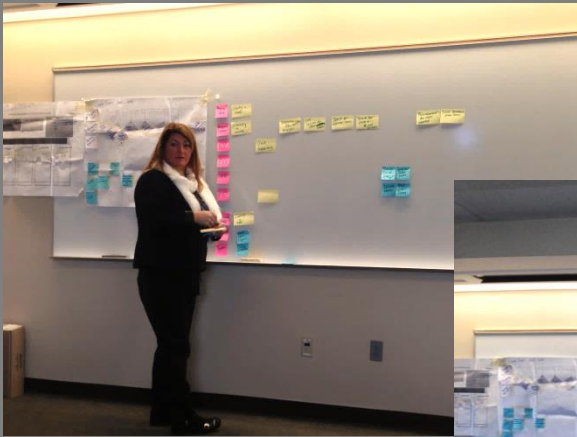
What Measured	How Measured		
		How Much	By When
Order Accuracy	Errors between program order and packing lists	From XX% to >90%	01 June
Process Cycle Time	Time from identification of need to item received and P-card reconciled	60% reduction (from ~73 mins. / order)	01 June

Kaizen Process at a Glance

7 Front Line Staff & Program Managers



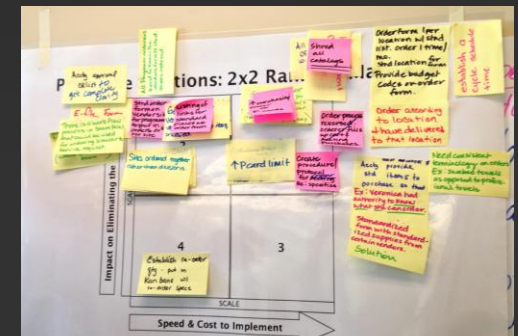
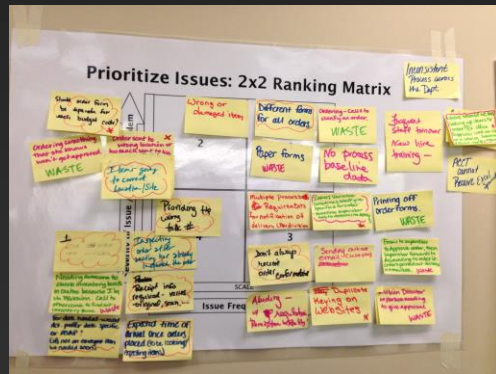
Capturing Our Current Process(s)



Prioritizing Issues

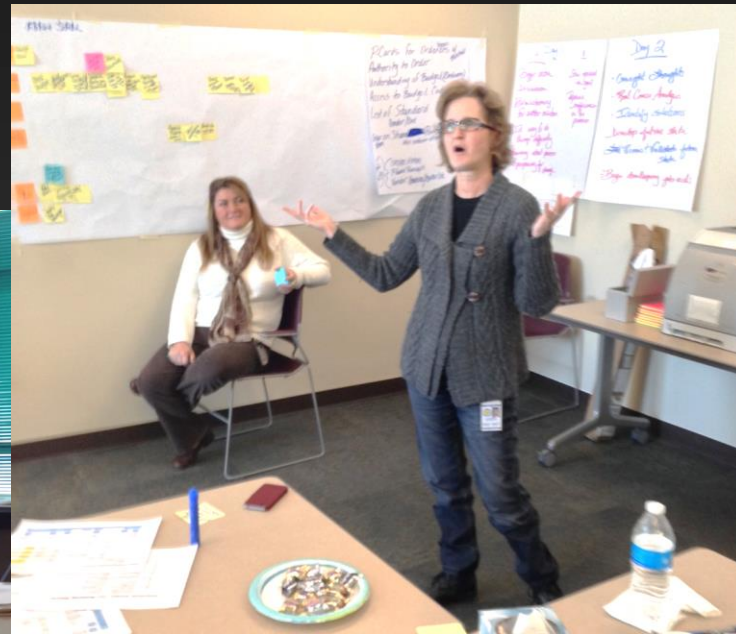
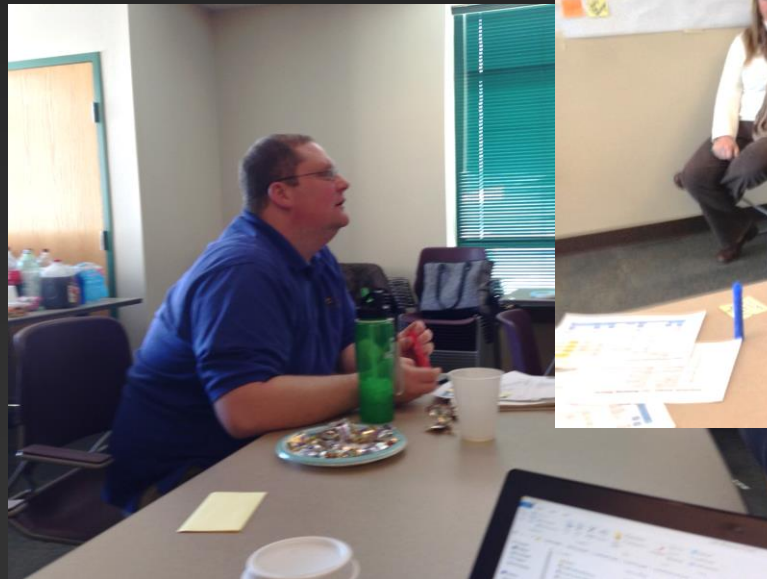


Prioritizing Solutions



The Kaizen Team

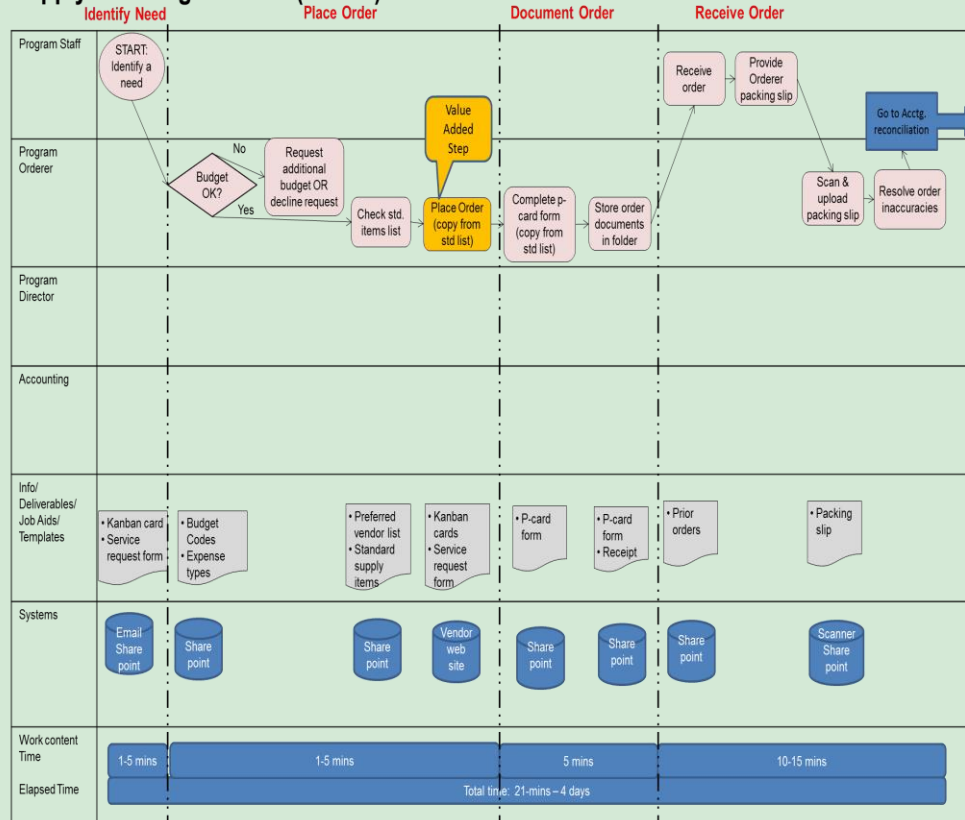
EMPOWERED to make decisions for the department in the future process of supply ordering.



Our future process

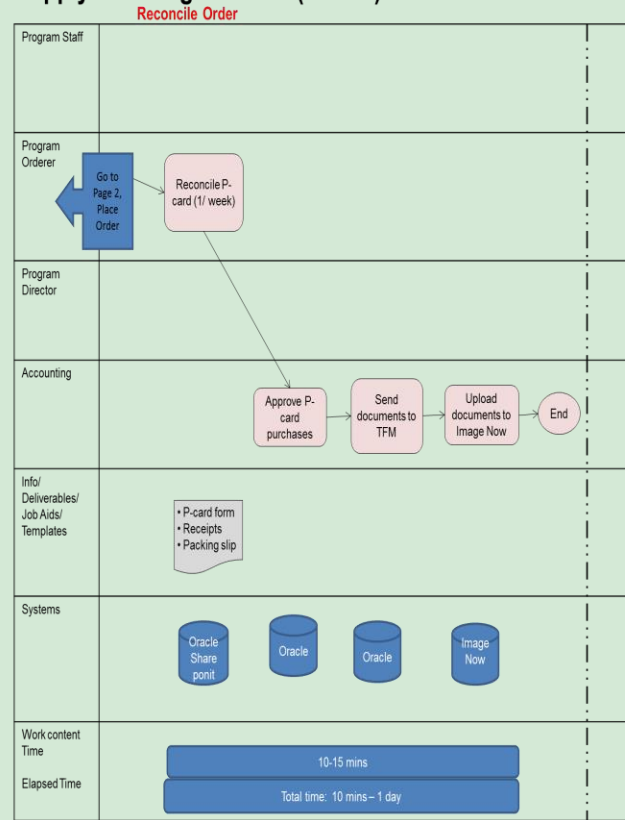
Supply Ordering Process (Future)

Date created 2/3/14



Page 1

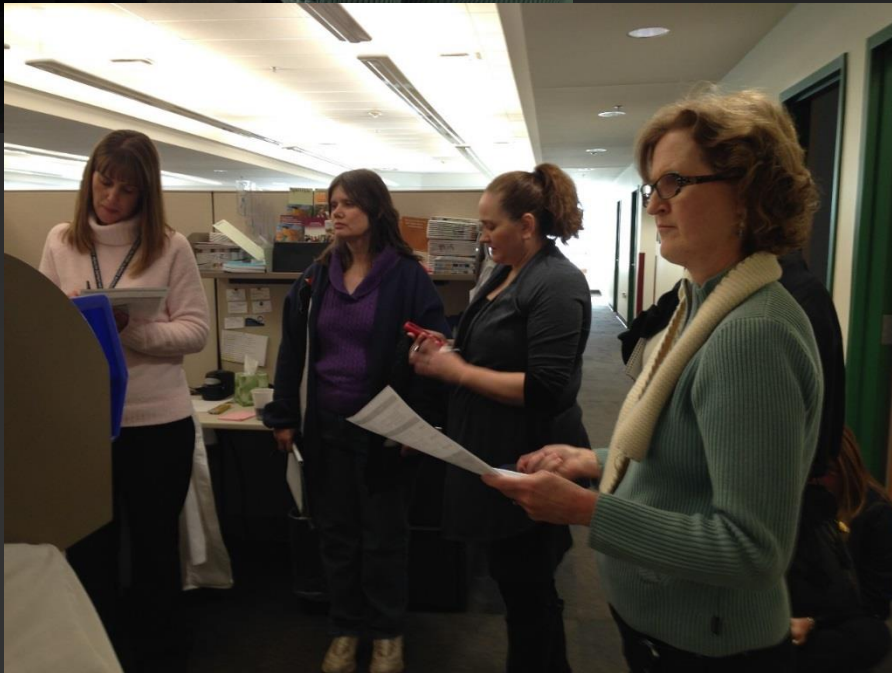
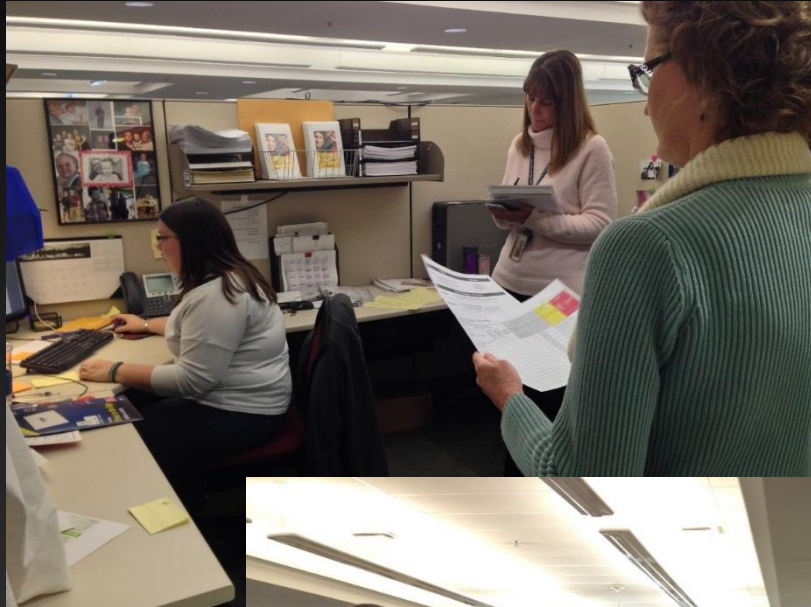
Supply Ordering Process (Future)



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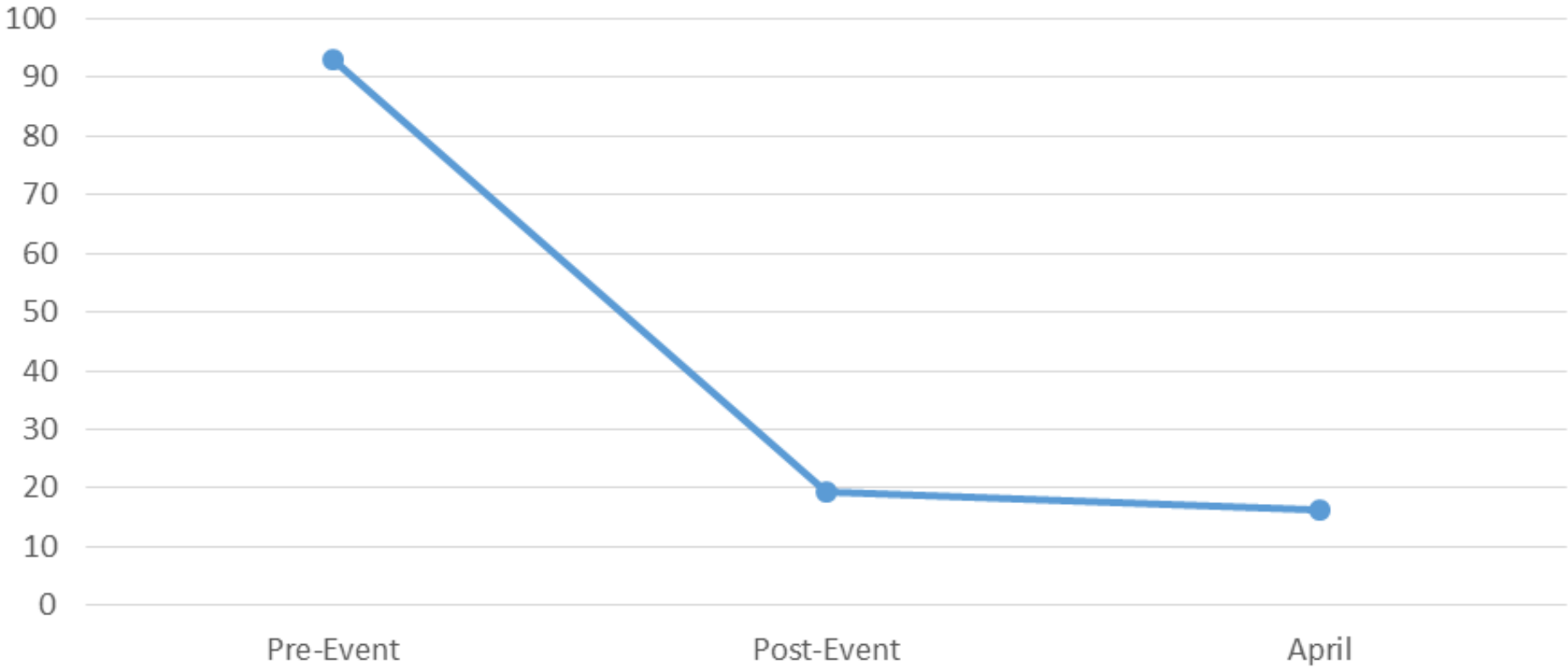
Going to the gemba



First round testing the future state of supply ordering showed that we had **69% potential improvement** in the cycle time or a decrease from **365** hours/year to **113** hours/year.

Continuous Improvement

Supply Order - Total Process Time



KAIZEN BENEFITS

Benefits That Were Expected Going In (I wasn't disappointed)

- Future state mapped out, solutions developed, and tested at end of 5 days
- Process/solutions developed that would result in meeting goal (we exceeded it)
- Knowledge of the Kaizen process and all the tools that lie within

Unexpected Benefits

- Change in the way one thinks
 - Be careful you may try to kaizen everything
- Contagious nature of QI
 - 3 additional process maps
 - More processes identified to Kaizen (Agency wide Fee Structure)
 - Other program areas asking questions
- Continued enthusiasm
- The result on staff morale



“I’ve worked here for 30 years and never thought it was possible to change anything, let alone be asked how I thought it should be changed” . Patti Perillo – Member of the team

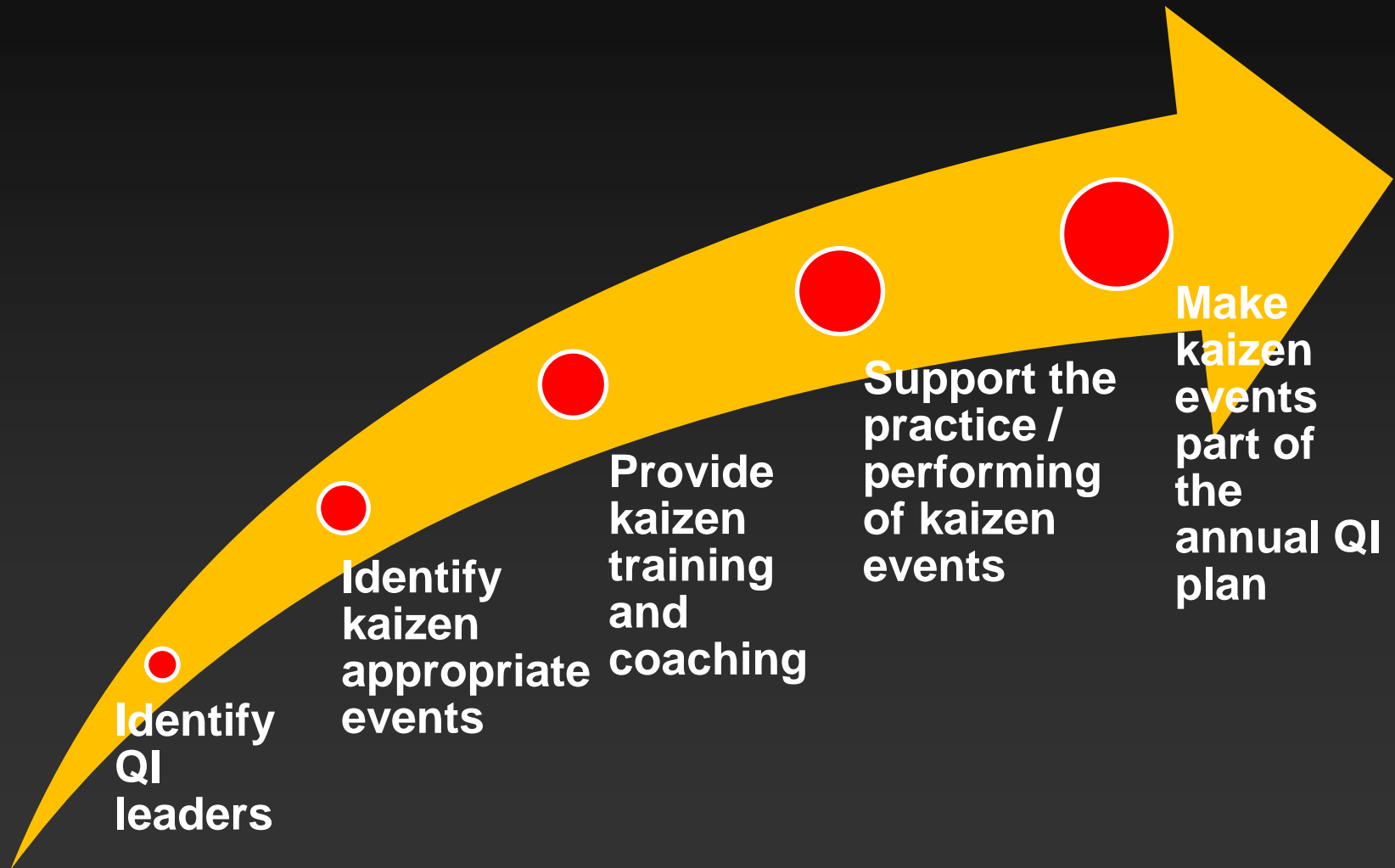
Johnson County Department of Health & Environment Supply Ordering Process

Kaizen Benefits

Efficient Committed
Empowers Laughing
Motivated Vested-Interest
Affect-Everyone Accountability
Diverse-Work-Groups
Bigger-Picture Positive-Energy
All-Levels Team-Building Smiling
Communication Autonomous
Effective-Tools

GETTING STARTED WITH KAIZEN

Getting Started with Kaizen Methodology



Kaizen Event Leader Roles

Lead the improvement activities to secure the event's goals are achieved

- Educate self and others
- Assist in identifying & confirming kaizen events
- Prepare stakeholders for the event (Stakeholder Analysis, Change Management, and Communications)
- Perform the event
- Ensure goals are achieved and improvement continues
- Share, Learn, Replicate

Kaizen Event Leader

Knowledge, Skills, & Abilities

- Efficient and confident command of various QI techniques that can be used during Kaizen
- Desire to learn / try
- Desire to share knowledge and develop others
- Skill in evaluation of people, performance, activity using data. Goal and measurement oriented
- Organizational skills / ability to multi task
- Ability to effectively collaborate, build relationships and motivate others throughout all levels of the organization; credibility with peers
- Coaching skills - Ability to deliver challenging feedback and bad news - direct and honest

QI Methods & Techniques

Team	Planning & Analysis	Problem Solving – Foundational	Problem Solving – Advanced
Team facilitation	Goal setting	Value stream and sub process mapping	Mistake Proofing
Working with Others skills	Measurement definition	Root cause analysis & 5 Whys	Failure Mode Effect Analysis (FMEA)
Team Building / Energizers	Data collection	Waste identification	Testing techniques
Stakeholder analysis	Data analysis	Waste analysis (value added ratio)	Flow, Kanbans, Takt time
Change Management	Project management	Spaghetti diagram	Quality at the source
Effective Communications		Prioritization methods	Work Place Organization / 5S
Teaching techniques (tell, show, do, recycle)		Decision making	Quick Change
		Standardized work	
Process Installation		Capture learnings	

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CALM
AND
KAIZEN
IT

In Closing...

Kaizen is a powerful QI method for involving the team in achieving rapid improvement.

- Become trained and skilled at using the kaizen event methodology
- Seek coaching to continue growing kaizen knowledge, skills, and abilities
- Grab a problem, a team, and **go kaizen!**

In Closing...

- Seek out COPPHI Kaizen Program members
 - Lil at NNPHI (ljohnson@nnphi.org)
 - Chris & Pam at Continual Impact LLC
(chris.bujak@continualimpact.com, pam.vecellio@continualimpact.com)
 - QI Leaders (Olivia, Deb)
(olivia.byron-cooper@edcgov.us, debra.whiteman@jocogov.org)
- Attend another Kaizen session (concurrent or poster) at the Open Forum for Quality Improvement in Public Health
- Access the Kaizen webinar from www.nnphi.org
- Find the 10 kaizen events in PHQIX coming summer 2014

Questions? Comments? Ideas?

