

The term **KAIZEN** is Japanese, meaning to **change** (kai) for the **better** (zen). Kaizen teams achieve this by analyzing every part of a work process – then transforming it to be **simpler, faster, better, and less costly**.

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<ul style="list-style-type: none"> • Introductions • Scope • Level-Setting • Current State 	<ul style="list-style-type: none"> • Waste Identification • Training • Brainstorming 	<ul style="list-style-type: none"> • Clean-Sheet Redesigns • Analysis • Future State Development 	<ul style="list-style-type: none"> • Implementation Planning • Details • Metrics 	<ul style="list-style-type: none"> • Refine Plans and Projections • Report-Out Presentation

Ground Rules

- Everyone participates
- Open, honest dialogue
- Respect opinions
- Consensus
- Leave rank at the door

Housekeeping

- Silence your cell phones
- Minimize interruptions
- Be on time
- Stand and stretch
- It's always snack time
- Dress in casual clothes

Expectations

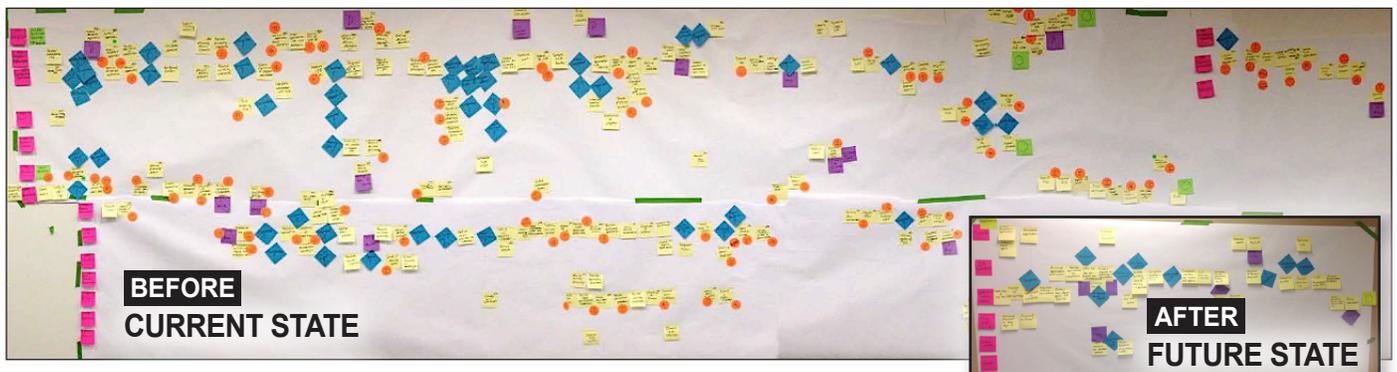
- A transformed process
- Resource savings
- Customers served faster
- Less waste in process
- Hard work
- Post-It Notes
- Change (for the better)



Contents

- Page 2 – Kaizen Terms
- 3 – SIPOC
- 4 – Process Mapping
- 5 – Notes
- 6 – TIM U WOOD (waste)
- 7 – Impact-Control Matrix
- 8 – Clean-Sheet Redesign
- 9 – Measures of Success
- 10 – Action Registers
- 11 – After the Kaizen Event
- 12 – Quick-View Reference

This is what transformation looks like!



After a Kaizen event, this redesigned process has **183 fewer steps** (80% reduction), **52 fewer decision points** (84% reduction), and **11 fewer delays** (61%). The fully streamlined process will move **1.5 months faster**.



Words you'll hear (and use) during the Kaizen event

consensus: Agreement in which all members of the group publicly state that they will actively support the decision, even if it might not be the first choice for some in the group.

cycle time: The length of time, on average, that it takes to complete a step or set of steps within a process. Sometimes referred to as *touch time*.

5S + Safety: A method for creating and maintaining an organized, high-performance workplace. **5S** stands for **sort, straighten, shine, standardize, sustain**.

lead time: The average time it takes to meet a customer request or demand – from the very start of the process to the end. This includes time when the unit is being actively worked on, plus wasted time due to delays, loopbacks, rework, and others forms of waste. (See TIM U WOOD) Also known as *throughput time* or *turnaround time*.

Pareto Principle: The observation that for many events, roughly 80% of the effects come from 20% of the causes. Also known as the *law of the vital few*.

poka-yoke: Any effort to eliminate the root causes of defects, so that rework-generating problems don't occur in the first place. Also known as *defect prevention* or *mistake-proofing*. Often used with forms.

round-robin: Getting comment from everyone in a group, with one person speaking, then the next, and then the next – until all voices are heard.

SIPOC: Stands for **suppliers, inputs, process, outputs, and customers**. You obtain inputs from suppliers, add value through your process, and provide an output that meets or exceeds customer requirements.

swim lanes: Separate rows on a process map that indicate separate functions.

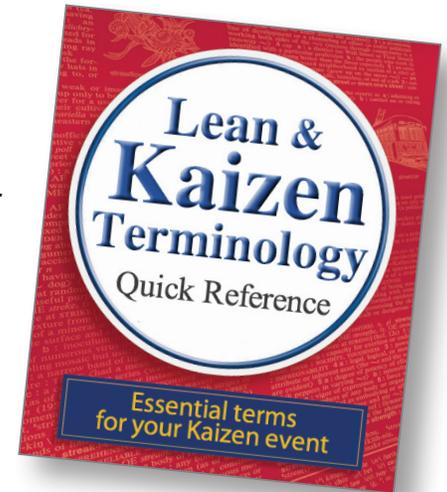
TIM U WOOD: Acronym used to remember the eight forms of waste: **transportation, information/inventory, motion, underutilization, waiting, overproduction, overprocessing, and defects**.

value-added, or VA: Work activities that transform information into services and products the customer is willing to accept. To qualify as value-added, an activity must meet these three requirements: (1) Done right the first time, with no defects. (2) Transformational in that it adds form or function. (3) Customer is willing to pay for it. Typically, just 1-5% of a process is value-added.

non-value-added, or NVA: Consumes resources, does not contribute directly to service, and is not important to the customer.

non-value-added but necessary, or NVAN: Not important to the customer, but the work activities/steps are required by statute or law.

waste: Any activity that uses resources but does not create value for the customer. (See TIM U WOOD)



SIPOC

Start here →

SUPPLIERS	INPUTS	PROCESS	OUTPUTS	CUSTOMERS
<p>Who provides inputs that are needed to make this process work?</p> <p><i>Can include people, other offices, agencies, organizations, etc.</i></p>	<p>What resources do you need to perform this process?</p> <p><i>Can include materials, supplies, information, authorization, services, etc.</i></p>	<p>What are the 5-7 major milestones that make up this process?</p>	<p>What is produced by this process?</p> <p><i>Can include services, products, information, decisions, etc.</i></p>	<p>Who benefits from this process?</p>

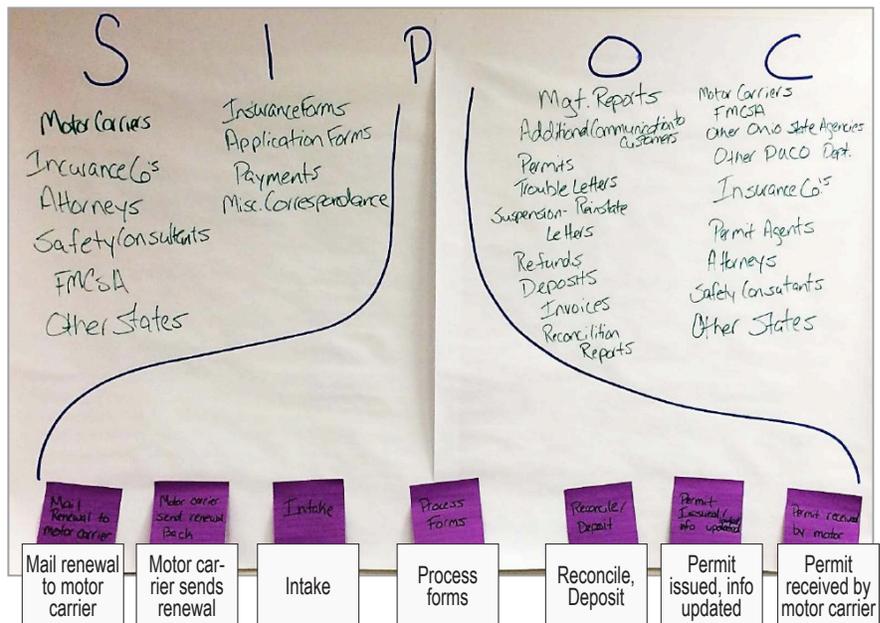
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Example: SIPOC in action

SIPOC stands for **suppliers, inputs, process, outputs, and customers**.

In one of the first steps of every Kaizen event, the team develops a SIPOC to establish a common understanding of the big picture.

The SIPOC shown here was created during a Kaizen event at the Public Utilities Commission of Ohio.



PROCESS MAPPING is all about **making the invisible visible.**

By creating a process map, you will:

- Get a clear and detailed visual of what is occurring in the process
- Create a common understanding
- Identify all stakeholders involved in the process
- Identify process handoffs and loopbacks
- Identify waste and value-added activities

Process map key:

-  Different functional areas of process
-  Beginning and end points of the process
-  Any activity where work is performed in the process
-  Decision point: Steps in the process where information is checked against established standards and a decision is made on what to do next (must have two or more different paths)
-  Delay: Any time information is waiting before the next task or decision occurs in the process (examples: in-baskets, batching, multiple approvals)
-  Connects tasks performed by the same person or area, but without any physical movement occurring
-  Indicates physical movement of information, items, etc. from one person or function to another
-  Indicates electronic movement of information from one person or function to another

Process mapping tips:

- One voice
- Write tasks in “one noun, one verb” format, or “one verb, one noun”
- Stay at a consistent level
- Start by identifying the functional area that starts the process
- Detail the tasks, decisions, and delays in each functional area
- Follow a “swim lane” model
- Draw in your swim lane lines
- Connect steps with arrows

Process mapping questions:

- Who starts this process?
- How does the process start?
- And then what...?
- What happens next...?
- Are we in the weeds?
- If I am the customer, I do...?



T

TRANSPORTATION

- Transport from office to office
- Transport from floor to floor
- Transport from building to building
- Other transportation and travel

I

INFORMATION, INVENTORY

- Finished product
- Storage
- Printed in advance
- Work in process
- In the warehouse
- Requiring unnecessary info on a form

M

MOTION

- Inter-office movement
- Office to office
- Cubicle to cubicle
- Going to the copier or scanner
- Going to the fax
- Going to the storeroom
- Reaching
- Bending

U

UNDERUTILIZATION

- Employees
- Talent
- Office space
- Technology
- Equipment

W

WAITING

- Nonproductive time
- Waiting for:
 - copier
 - scanner
 - delivery
 - catchup
 - person upstream
 - mail/shipper
 - computer

O

OVERPRODUCTION

- Making too many
- Making in advance of requests
- Throwing away the excess
- Things getting outdated
- “We have to be ready”
- Not cautious, but wasteful

O

OVERPROCESSING

- Adding things that nobody wants
- Report that nobody reads
- “Gold plating”
- The best
- Better than good enough
- Beyond meeting customer expectations

D

DEFECTS

- Mistakes
- Broken
- Inaccurate
- Can't read
- Can't understand
- Wasted materials
- Returned

IMPACT-CONTROL MATRIX

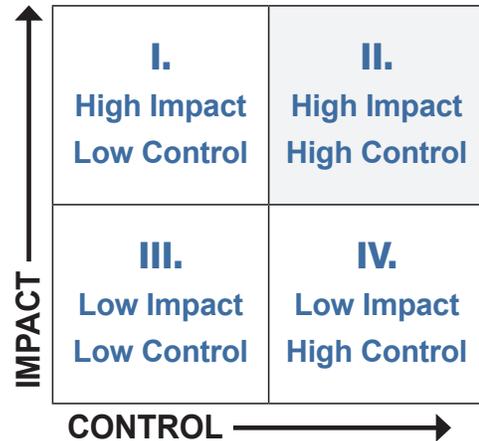
1 Write down all of your improvement ideas.



2 All ideas are collected.



3 The ideas are discussed and placed on the impact-control matrix.



4 The result will look like this, with the ideas sorted – and the group moving closer to clean-sheet redesign.



CLEAN-SHEET REDESIGN

MAKE IT TRANSFORMATIONAL

- Create a new process that is **significantly better** than the old one
- Reduce process steps, costs, and time by **at least 50%**
- **Delight** the customers

Tips for designing a new and transformed process:

- Design process around value-adding activities
- Ensure that work is performed where it makes the most sense
- Provide single point of contact for customers and suppliers
- If the inputs coming into the process naturally cluster, create a separate process for each cluster
- Ensure a continuous flow of the “main sequence”
- Reduce waiting, moving, and rework time
- Reduce or eliminate batching
- Reduce checks and reviews
- Push decision-making down to the lowest reasonable level
- Build in quality in order to reduce inspection and rework

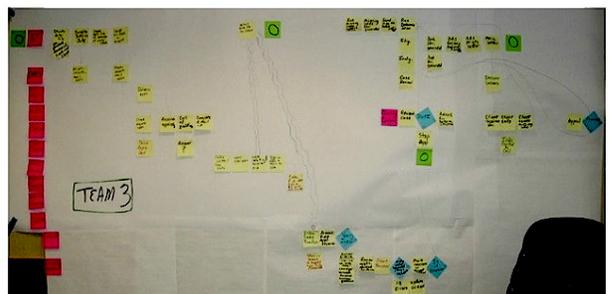
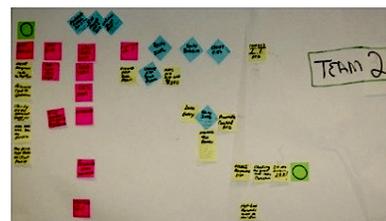
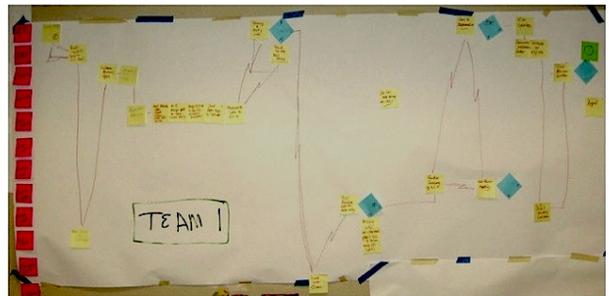
Example: Clean-sheet redesign in action

In the photo, a discussion is under way regarding a newly created redesign of the process. This subgroup is one



of three subgroups (from the Ohio Department of Insurance) that are working simultaneously, each developing a separate clean-sheet redesign.

Below are three clean-sheet redesigns from a Kaizen event at the Ohio Development Services Agency.



MEASURES OF SUCCESS

Time-based process measures

- ↓ Lead time (beginning to end)
- ↓ Cycle time (touch time)
- ↓ Waiting time
- ↓ Time to complete form
- ↓ Motion, travel time

Count-based process measures

- ↓ Process steps
- ↓ Handoffs
- ↓ Decision points
- ↓ Loopbacks
- ↓ Delays
- ↓ Customer complaints
- ↓ Number of forms
- ↓ Inventory quantity
- ↓ Backlog

Outcome measures

- ↑ Customer satisfaction
- ↑ Redirected work hours due to gains in efficiency
- ↑ Direct cost savings \$
- ↑ Customer cost savings \$

Cost savings can accrue from reductions in:

- Imaging, scanning
- Paper, forms
- Printing
- Postage, shipping
- Storage, inventory
- Fuel usage
- Other supplies
- Travel
- Overtime
- Etc.

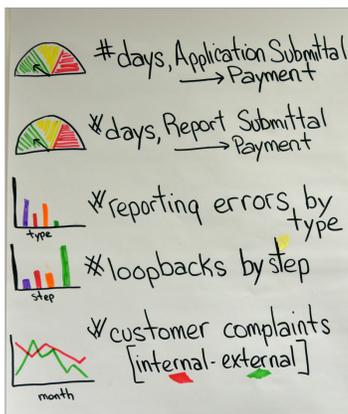
Examples: Measurement in action



	Now	NEW
Steps	87	43
Decisions	9	3
Handoffs	22	16
Loopbacks	6	1
Delays	7	0
Lead Time	36 days to 275 days	19-51 days to 8-10 days

SCORE CARD	Current	NEW	%Δ
Process Steps	183	26	86%
LOOP BACKS	10	2	80%
HAND-OFFS	29	6	79%
DECISION POINTS	39	5	87%
WASTE	54	5	91%
PROCESS LEAD TIME	19-51 DAYS	45-10 DAYS	76-80%

DASHBOARD



Cost Benefit Analysis

Unit Direct Cost SAVINGS

- > RECORD RETENTION COSTS
800 boxes x .85 per box x 12 = \$8160 yr.
- > BULK SHIPMENTS
\$4,000 ÷ 2 = \$2,000 yr.
- > D.A.S. Mailing FORMS
450,000 x .46 per form ÷ 2 = \$103,500
- > Application Printing

Unit Cost Avoidance

36 - 275 days	
x 7.5 hr	x 7.5 hr
270	2,063 hrs
=	
21	26 days
7.5 hr	7.5 hr.
158	195 hrs
112	1868 - hrs. SAVED

possible



ACTION REGISTERS

WHAT	WHO	WHEN
What task or objective needs to be accomplished?	Who will take the lead to ensure that the team accomplishes it?	When will the task begin, and when it will be completed?

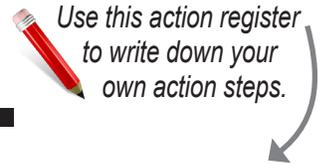
What	Who	When
email [Director's internal update video] highlights of unified grant process/kaizen team	Jackie	3.24
"E-News Now" highlights process improvements	Kraig	3.28
internal email that IFA ready for release/open to field	Rosaland	5.8
external email that IFA is available for MHHS certified current grant recipients	Rosaland	5.12
biweekly and/or significant updates in ENN + internal + responsibility of communication (FAQs) to other potential grantees	Kraig - Debbie (to Eric)	3.31
Project Lead connects to respective projects - schedule conference call(s), monthly contact	Jackie Drew	4.7
Announce training (webinar) for unified/IFA available including an "on-site, l-time," live option	(Communications) Johanna (to Tracy)	4.23
system-generated emails throughout application process	Mike U	5.12
internal communication ref: FAQs	Jackie	5.19
regular biweekly (face-to-face) team meeting - thorough roll-out and continue to schedule thru payment push out	Kraig - Debbie	3.26

Example: Action Registers

In a Kaizen event with the Ohio Board of Nursing, the team developed action registers for IT, consumer information, complaint processing, training, communication, and more.

The image shows several handwritten action registers and project plans. Key examples include:

- IT Action Register:** Lists tasks like 'Update requirements', 'Communicate reqs to IT staff', 'IT Develop Requirements/Access', and 'Go Live!' with assigned staff and dates.
- Consumer Information Action Register:** Lists tasks like 'update justice type review implement' with assigned staff like 'Angie F. Lee, Deborah' and 'Mike'.
- Complaint Processing Form Action Register:** Lists tasks like 'update', 'Designed', 'Review', and 'Implement' with assigned staff like 'Angie, Leah', 'Mike', and 'Carson'.
- Communication Plan:** A detailed plan with columns for 'WHAT?', 'WHO?', 'WHEN?', and 'HOW?' covering items like 'Response', 'Report out', 'Fact Sheet', 'Fact Sheet/Info', 'Bank Paperwork', and 'Status of Implementation'.
- ADM/ETIP Backlog:** Lists tasks like 'Run Report', 'Create Process', and 'Implement' with assigned staff like 'Judy' and 'Investigators'.
- Enf. Backlog:** Lists tasks like 'Run Report', 'Create Process', and 'Implement' with assigned staff like 'Pati' and 'EAS'.



AFTER THE KAIZEN EVENT...

10 WAYS YOU CAN MAGNIFY THE MOMENTUM

1. Follow through and begin implementing your action items.
2. If there's a briefing for staff about the Kaizen event, be sure to attend. Serve as a presenter if you have the opportunity.
3. If you have co-workers who weren't on the Kaizen team, fill them in. Over time, involve them in the change process.

WHAT	WHO ELSE	WHEN
What action steps are you responsible for?	Who else (if anyone) will you involve?	When will you begin and complete this activity?

4. If you hear comments from colleagues that suggest they're unclear or mistaken about changes that will result from the Kaizen event, kindly provide the correct information.
5. When there are meetings relating to your Kaizen project, attend and participate.
6. Also attend the more formal update meetings to check implementation progress and clarify the next round of action steps. Update meetings typically occur about 30, 60, and 90 days after the Kaizen event.
7. Resist slipping back to your old way of doing things. Go with the new way, knowing that change will be challenging in the short term but better for everyone in the long term.
8. Exercise patience and persistence. After the fast-moving Kaizen event, things at work might seem a bit slow by comparison. Don't lose your focus. You have a plan – now work the plan.
9. If you see that key actions are not being implemented – actions you're not responsible for but you know to be important – bring it up with the appropriate person and offer to help.
10. Be thoughtfully flexible as implementation unfolds. Keep an open mind and a willingness to make a good project even better.



QUICK-VIEW REFERENCE

KEY TERMS:

consensus: All team members state that they will actively support the decision, even if it might not be the first choice for some.

lead time: Average time from the start of the process to the finish.

Pareto Principle: Roughly 80% of the effects come from 20% of the causes.

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TIM U WOOD:

- Transportation
- Information/Inventory
- Motion
- Underutilization
- Waiting
- Overproduction
- Overprocessing
- Defects

IMPACT-CONTROL:

IMPACT	High Impact Low Control	High Impact High Control
	Low Impact Low Control	Low Impact High Control
	CONTROL →	

MEASURES:

- Time-based measures**
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ACTION REGISTER:

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"The measure of intelligence is the ability to change."
— Albert Einstein