# Kaizen Reference Guide

Pre-Event

- Identify process/system for improvement and primary stakeholders.
- Complete Specific Problem Statement (Project Charter/Case for Change)
- Get approval from Sponsor. Identify Team Leader and Facilitator (Lean Champion).
- Identify Team members - include those who actually perform work in the area.
- Schedule pre-planning meeting with Team
  - Introduce Kaizen, 8 Forms of Waste, standard work, value vs. non-value, value stream mapping.
  - Finish Project Charter/Case for Change: Business Case, Specific Goal Statement, Scope of Project
- Collect process data/statistics.
- Schedule Kaizen Event date. Notify all staff of Event (open-door policy).
- Gather supplies the day before the Event.

Day 1

- Review of Lean Elements, Rules, Tools
- Review Problem Statement, Goals and supporting documentation.
- Warm-up Activities (The Customer, 5 Whys).
- Review Team Rules.
- Develop Current State Map (take photos).
- Identify Value Added (VA), Non-Value Added (NVA), and Non-Value Added but Required activities (NVAR).
- Calculate VA, NVA, NVAR, and Total Cycle Time.
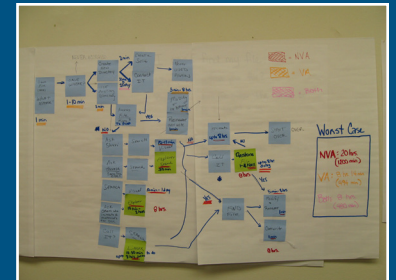
Day 2

- Identify Waste in Current State Map.
- Create Future State Map (take photos).
- Develop Standard Work and Single Piece Flow.
- Develop Visual Workplace.
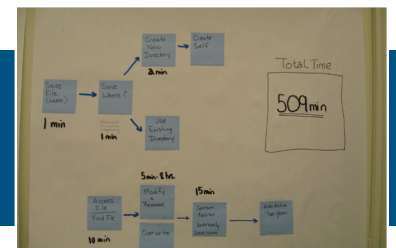
Day 3

- Determine if all Goals have been met.
- Identify outcomes (performance measures).
- Complete Kaizen Implementation Plan/Assignments (limit to two weeks).
- Finalize PowerPoint.
- Identify Presenter Roles for Management Presentation.
- Closing: Lessons Learned, Future Items to Address.
- Take Team photo.

Post-Event

- Present to Management.
- Post Event details and photos on a bulletin board or a common area.
- Celebrate and communicate your success with others.
- Complete all assignments from Kaizen Implementation Plan.
- Train staff!

Value vs. Non-Value

Everything that we do should be questioned for value. When considering an activity or process, ask yourselves: Would your downstream users perceive this as adding value?

If our downstream users (customers) knew we were providing the activity or process:

> Would they be willing to pay for it?
> Would it meet their expectations?

Definition of a Value Stream: All ESSENTIAL actions (people, info, materials) to bring a product or service through the main process steps from beginning to end.
Definition of a Value Stream Map: A diagram that shows all steps, whether they are Value Added, Non-Value Added, or Non-Value Added but Required.

Kaizen Supplies

Easel
Easel Paper (self-sticking)
Post-Its
Markers
Camera
Computer
Tools: Kaizen Event template (PowerPoint)
        Kaizen Checklist and Implementation Plan
        (Excel)

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The 8 Forms of Waste

1. Mistakes/Reworks
2. Excess Inventory (includes material, time and information)
3. Transporting (Unnecessary Transport of Materials)
4. Motion (Unnecessary Movement of People)
5. Waiting
6. Processing (Excess Process Steps)
7. Overproducing (Services/Goods do not meet the Needs of the Customer)
8. Failure to Utilize the Time and/or Staff Talents

Lean Element & Rules

Elements
1. Value Stream
2. Flow: no process moves faster than the slowest step
3. Pull: continuous flow of info/materials through a process to meet downstream demand
4. Perfection: eliminate waste, continue to improve process…becoming the BEST at everything we do

Elements
1. Standard Work: everyone does the process exactly the same way every time
2. Limit Material/Information Travel
3. Limit People Hand/Feet Travel
4. Lean Education for All

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Lean Tools: www.uhl.uiowa.edu

Examples of Tools

1. 6S: Sort, Simplify, Sweep, Standardize, Sustain, Safety
2. TPM (Total Productive Maintenance): keep equipment in perfect working order to reduce breakdowns
3. Value Stream Map
4. Spaghetti Charts: shows people and material flow in an area to determine travel times and rerouting
5. The 5 Whys: used to identify the true (root) cause of a problem
6. Process Mapping: shows each step in a process
7. Takt Time: how fast you need to produce to meet downstream demand
8. Work Balancing/Leveling: each process step takes about the same amount of time and workload is evenly distributed among staff – all to meet downstream demand
9. Poka-Yoke: proofing a process to eliminate errors and incorporate quality control
10. DFEU (Design for Ease of Use): design process to eliminate waste, be as simple as possible, and easy to use
11. One Need Flow: Reduce batch size to as small as possible
12. Flow Cells: Placing people/equipment close together to allow uninterrupted flow
13. Kanban: signal to indicate delivery of a specific supply to a specific process location
14. Visual Workplace: reflects status of Work Area and tracking of performance measures