White Collar Lean - Kaizen Events for the Office

May 19, 2011
San Gabriel Valley APICS
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Learning Objectives

- Learn why kaizen events in administrative environments need to be managed differently than in manufacturing environments
- Get an overview of the different stages and timing of office kaizen events
- Get pointers on how to improve your team’s ability to assure gains are sustained
- Learn what some of the key tools are that are used in administrative Kaizen Events.
Office Improvement

Different approaches.....
Kaizen Event – Definition

A two- to five-day focused improvement activity during which a sequestered, cross-functional team designs and **fully implements** improvements to a defined process or work area, generating rapid results and learned behavior.

Karen Martin & Mike Osterling
*The Kaizen Event Planner, 2007*
Kaizen Events - The Concept

- **Rapid Implementation (during the event)**
  - One piece flow in project execution
- Short duration, but 100% of time (typically 2 - 5 days)
- Focused improvement activity
  - Aggressive, measurable objectives
- Employee engagement – those who know the process best
  - Learning through doing
- Low cost
  - Define and exploit the “technical boundaries” of existing resources
  - Creativity before capital

Kaizen Event Objectives

- Waste elimination / reduction to create flow
  - Eliminate unnecessary non-value-added activities
  - Minimize necessary non-value-added activities
  - Optimize value add activities
- Reduce lead time and process time
  - Lead time = elapsed time; throughput time; turnaround time
  - Process time = compressed process time; touch time
- Improve quality
- Develop employees, improve morale & increase job satisfaction
The Need to Change
“Staple Yourself to an Order”

Support Activities: 60-80% of Lead Time

QUOTE / ORDER  Total Lead Time  CASH

Common Components of Product Cost
21st Century

Overhead  25%

Direct Labor

Materials  65%

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Kaizens work great in manufacturing, but aren’t we different?

- People/Culture/Organizational Structure
- Product produced
- Process-related Issues
- Performance, measurement & and monitoring
Activity

Five minutes with your neighbor:

- Identify and discuss at least three different ways in which office process improvement is different than shop-floor improvement activities.

Typical Office Environment

People / Culture / Org Structure  Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>Addressing within Kaizen Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silo’d organizational structure / silo’d thinking</td>
<td>Cross-functional team composition generates more effective solutions</td>
</tr>
<tr>
<td>Lack of problem-solving skill set</td>
<td>Practice the use of PDCA to address actual issues</td>
</tr>
<tr>
<td>Inexperience moving quickly – fast decisions, fast implementation</td>
<td>Demonstrated application of fast decision making &amp; rapid implementation</td>
</tr>
<tr>
<td>Staff not used to change</td>
<td>Kaizen events are a rapid change, “can-do” environment</td>
</tr>
<tr>
<td>High degree of personal ownership</td>
<td>Expose workers to the whole process, and how optimized performance can only be achieved through addressing the whole</td>
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</table>
### Typical Office Environment

#### Product-related Issues

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<tr>
<td>Inexperience defining product / output</td>
<td>Discussing immediate/internal customer requirements</td>
</tr>
<tr>
<td>Product not visible</td>
<td>Use of visual improvement tools to help see the product flow – from beginning to end</td>
</tr>
<tr>
<td><strong>Disconnected from both internal and external customers</strong></td>
<td>Gain understanding re: internal input and output requirements</td>
</tr>
<tr>
<td></td>
<td>Learn how to analyze processes from the external customer’s perspective</td>
</tr>
<tr>
<td><strong>High variation in customer needs / requirements</strong></td>
<td>Identify and standardize work that is common; checklists to help identify how to address varying needs</td>
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#### Process-related Issues

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<tr>
<td>Lack of awareness of customer–supplier relationships</td>
<td>Metrics-Based Process Mapping (MBPM) highlights these relationships and performance at each step in the process.</td>
</tr>
<tr>
<td><strong>Co-mingling of policy and procedure</strong></td>
<td>Highlights relationship between policy and procedure; provides opportunity to change policy quickly</td>
</tr>
<tr>
<td>High degree of multi-tasking</td>
<td>Highlights the flow-stopping aspects of multi-tasking; begins to shape future organizational thinking</td>
</tr>
<tr>
<td><strong>Belief that work shouldn’t and can’t be standardized</strong></td>
<td>They learn that you can create a standard work “spine”</td>
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## Typical Office Environment
### Performance, Measurement, Monitoring Issues

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<tr>
<td>Little history of process and performance measurement / lack of data</td>
<td>Introduction of time and quality metrics; data-driven decisions</td>
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<td>Quality isn’t typically measured</td>
<td>Introduction of %C&amp;A and RFPY metrics</td>
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<tr>
<td>Sub-optimization due to silo’d problem solving</td>
<td>Emphasis on improving the overall process, not just performance within specific steps</td>
</tr>
<tr>
<td>More difficult to see the waste</td>
<td>Training and facilitation on identification of “value-add,” “necessary non-value add,” and “unnecessary non-value add” activities</td>
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### Kaizen Events Stages

- Pre-Event Activities (Planning)
- Event Activities (Execution)
- Post-Event Activities (Follow-up)
Pre-Event Activities

- Kaizen Charter – start 4 weeks before the event. Iterative process.
  - Scope it
  - Staff it
  - Schedule it

Standard Work For Kaizen Event Preparation

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<th>Event Goals and Objectives</th>
<th>Potential Deliverables</th>
<th>Possible Obstacles</th>
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<th>Specific Conditions</th>
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Kaizen Charter - Scope

- What Value Stream are we working on?
- Where does the process begin and end?
- What barriers / boundaries will we be working within?
- What are the goals and objectives?

Initiates communication; *drives engagement and promotes early buy-in of functional leadership early in the process*

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Kaizen Charter – Staffing

- Event leadership
  - Executive Sponsor
  - Value Stream Champion
  - Facilitator
  - Team Lead
  - Coordinator
- Team
  - Process owners
  - Subject matter experts
  - Outside eyes
- Support team
Management / Leadership Engagement

- Agreement that there is a problem
  - And a need to address it

- Support the activity
  - Appropriate people are on the team
  - Team is empowered – has authority to make changes (and make mistakes)
  - Coverage for team members as required
  - Stay abreast of what is going on
    - Engaged in charter development
    - Attend debriefs and final report
    - Monitor process after improvements put in place

The Kaizen Team

- “Sequestered jury” - no more than 10

- Cross-functional composition
  - Process workers (upstream & downstream representation, internal & external)
  - Subject matter experts & admin support
  - The “influencers”
  - Outside eyes
  - Others (union, management, trainees…?)

- Obtain direct supervisors’ agreement first
- Must be relieved of regular duties
Kaizen Charter – Scheduling

- Event
- Training on new process (during event)
- End of day debriefs
- Team presentation

Preparation & Logistics

<table>
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<tr>
<th>Kaizen Event Planning Checklist</th>
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<tr>
<td>Value Stream Champion</td>
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<tr>
<td>Facilitator Coordinator</td>
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3-Day Kaizen: Sample Structure

Day 1 & 2
Plan
Document / Process map current and future states (with metrics)

Day 2 & 3
Do, Check
Design & test improvements using Lean tools; obtain buy-in

Day 3
Check, Act
Finalize improvements; train process workers and affected stakeholders; provide closeout briefing; CELEBRATE!

Common Tools Within Office Events

- Understanding the Process
  - Go to gemba!!!!
  - Metrics-based Process Mapping
  - Spaghetti diagrams
Current State: Finding the source of waste – investigations...

Understand the Current State: Metrics-Based Process Mapping

Process level - detailed map
- Swim lanes (by function)
- Metrics:
  - Lead Time (LT)
  - Process Time (PT)
  - Quality - %C&A
  % Complete and Accurate
Metrics-Based Process Map

Critical Path PT Sum: 57 minutes
Critical Path LT Sum: 14 days
Rolled First Pass Yield: 32.0%
Activity Ratio: 0.85%
# of Steps: 18
Pre-Sales Call Data Collection - current state!!

- family time?
- Synch systems
- credit status
- YTD sales?
- back orders
- open orders
- program status (1/month)
- hold report
- aging report (1/week)
- product history

5S on the Data Report

<table>
<thead>
<tr>
<th>Sort</th>
<th>Standardize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview/survey reps and IT; sort out all reports received and timing of data; identify data that is useful for the reps to have a successful sales call.</td>
<td>The new data report could become the standard for reps as a best practice when preparing and meeting with their customers.</td>
</tr>
<tr>
<td>Store</td>
<td>Sustain</td>
</tr>
<tr>
<td>Data report organizes data on one page with most of what the reps requested for the sales call; added visual aids, links to details and information previously not easily accessible.</td>
<td>Hand off to sales administration..... Opportunity to still enhance the data report and the sales planner with ideas or recommendations from sales management</td>
</tr>
<tr>
<td>Shine</td>
<td></td>
</tr>
<tr>
<td>Data report has ability to pull data currently, so as data is updated nightly the reps data should be only a day old.</td>
<td></td>
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</table>
Summarized Data Report

- Program Status (current)
- Terms
- Credit Status
- Customer Aging (current)
- Recent Payments
- Product history (3 years)
- Open Orders
- Back Orders
- YTD Sales

- More detailed information still available in...

Current State: Finding the source of waste – investigations...
Investigate – Spaghetti Diagrams

• Visualize travel of:
  – People
  – Product (“the thing”)

Once we understand the problem…
Identifying root cause so appropriate counter measures can be designed

- Ask “why” five times
- Cause-and-effect diagrams
- Check sheets
- Pareto charts
Problem Solving
Jefferson Memorial - True Story

Problem:
Excessive amounts of bird droppings required the monument to be pressure washed much more frequently than other memorials, causing erosion and deterioration of the granite.

How to keep the birds away?
• Elaborate system of spikes and nets (high cost solution)
• Loud noises to chase off the birds (and tourists)
• Kill the birds
• Or, let's ask “why?” several times...

Jefferson Memorial – 5 Why

1. The granite at the Jefferson Memorial is eroding and deteriorating faster than similar monuments. Why?
2. It is being power washed more frequently. Why?
3. The amount of bird droppings are more than other locations. Why?
4. There is an abnormally high population of spiders living under the roof line which the birds are feeding on. Why?
5. Because the spiders are feeding on an unusually high number of mating midge flies. Why?
6. The spot lights that illuminate the memorial attract the midges (of both sexes) during their peak mating period – just before dusk (resulting in a very high population of midge flies!)

Solution: The automatic lights were reset to turn on shortly after dusk, resulting in: Less mating. Fewer flies. Fewer spiders. Fewer birds. Less droppings. Fewer power washings. Less wear and tear.
5 Why Technique

- Ask “why” five times in order to identify the true root cause of a less complex defect or a problem
  - Avoids the tendency to only correct the symptoms
  - By identifying the true root cause, reoccurrence of the problem should be avoided
  - May require more or less than five whys
  - Stop when get to something we can control
  - The real root cause should point towards a process - what are we going to do differently in the future so the problem does not reoccur?
- Complex issues require more structure

Cause Effect Diagram
Cause-and-Effect Diagram

- People
  - Lack of experience
  - Time availability
  - No sense of import
- Material / Info
  - No std spread sheet
  - Changing schedule
  - Input rec’d late
- Method
  - No standard work
  - Email vs. FedEx
  - Weather delays
  - Dispersed sales force
  - Forecast in other system
  - Manual vs. PC
  - No milestones
  - $ vs. units
  - System avail.
- Machine
- Measurement
- Environment

Budgets Submitted Late

Tools to Find Root Causes

Check Sheet: Late Shipments

<table>
<thead>
<tr>
<th>Reason</th>
<th>Tally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material shortage</td>
<td></td>
</tr>
<tr>
<td>Quality issue requiring rework</td>
<td></td>
</tr>
<tr>
<td>Staffing/absenteeism</td>
<td></td>
</tr>
<tr>
<td>Order entry error</td>
<td></td>
</tr>
<tr>
<td>Changing customer requirements w/ no adjustment to expected delivery</td>
<td></td>
</tr>
<tr>
<td>Equipment failure</td>
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</table>

Quantify Occurrences
With a common understanding of what the actual problems is, and analysis performed to identify root cause… now we are ready to put in place countermeasures
Commonly Used Lean Tools

- **Process redesign**
  - Eliminating non-value-added approvals, review cycles, rework loops, etc.

- **Standard work**
  - Incorporating best practices / expedited practices
  - Checklists, routers, visual aids, etc.

- **Simple IT solutions**
  - **Visuals**, and organized workplace
  - **Co-locating** cross-functional team members
  - **Work balancing** via work redistribution and cross-training

Visualize

**BEFORE**

**AFTER**
Visualize

Standardize
Dear Retailer,

XYZ is excited to announce a new retail promotion, “Promo Bucks” featuring the XXX products.

Activated and planned to run parallel to the “Promo Bucks” promotion, it will offer consumers who purchase a set of XXXs a $100 in-store credit to be used for the purchase of any XYZ products. The promotion will run May 7 through July 31, 2010.

POS items for “Promo Bucks” promotions are available through your local XYZ sales representative and promotional assets are also available at the XYZ web site at: https://media.XYZinc.promobucks/

Thank you in advance for your support of this exciting new retail promotion!

——

“Team,
Attached is exciting $100 promotion for the XXX products. Every set products you sell, your customer gets $100 in Promo Bucks to be used toward the purchase of our products. Promotion Bucks must be used this year on standard products.

Details of how the promotion works are attached above in the 3 PDF’s:
- Sales Sheet – overview of promotion details
- 8.5” x 11” Frame Graphic – inserted in acrylic frames and/or to print
- Redemption Form – to complete with purchase”
PACE Chart
Kaizen Event Improvement Opportunity Prioritization

Opportunity
1. Freight Negotiation
2. Freight Processing
5. Add line item in SAP for freight
11. Proactive GR confirmation
13. Reactive GR confirmation
19. TJC Mapping to Cost Centers WBS
20. Map MGC to proper GL code
21. Training & Education
27. Auto-notification for PO/SO not referenced
29. Order creation completeness check
38. Reports
44. SLA when a funds increase for an SO is required
45. Improve SOW process flow
46. Leading Indicators
52. Incident Escalation

During the Event - Process Checks

Interim Briefings to leadership
- Every day or two
- Leadership’s role – not to say “no”
  - To say “Have you considered this?” “How would we handle…?” “What if…?”
- Team “sells” their ideas and gains support by demonstrating how well thought out their ideas are
- Leadership begins to “let go” of micromanagement and transition into stronger leadership roles
A Plan to Succeed
Key Elements for Sustainability

Sustainability planning (during the event) and activities after the event

- Communication
- Training
- Monitoring
- Measurement

Who identifies relevant documentation? Who updates it? By when?

Who communicates? How? To whom? Where posted?

How is process performance going to be communicated to workers? Are additional visuals needed? Who owns this activity?

Which value stream map(s) need to be updated, who will do it and when?

Who maintains training records?

Who communicates? How? To whom? Who is accountable? Where posted?

Post the Event Report, 30-Day List, Sustainability Plan.

Update SOPs and other ISO or regulatory documents impacted by changes.

Communicate and post 30-day and 60-day audit results.

Communicate audit results to stakeholders and leadership team.

Communicate process performance measurement plan.

Will there be rewards/recognition for sustaining improvements? What will corrective actions be if workers are not following new process? Who will enforce these rewards/consequences?

Who monitors process performance on an ongoing basis? Who communicates the results? Who is accountable? Where posted?

How will the process be adjusted, if needed? What’s the plan for continuous improvement?

Who has ultimate responsibility for how process is performing? Which Kaizen team member(s) will observe the process? How will they communicate results? Who is responsible for adjusting the process, if needed?

Who will lead audit & when? How will results be communicated? To whom?

How will the process be adjusted, if needed? What’s the plan for continuous improvement?

Who will lead audit & when? How will results be communicated? To whom?

How will the process be adjusted, if needed? What’s the plan for continuous improvement?

Who is responsible for finalizing process performance metrics and by when?

Which team member(s) will observe the process? When? How will they communicate results? Who is responsible for adjusting the process, if needed?
Communication is Critical - *Throughout*

- **Pre-Event**
  - Communicate upcoming event & schedules
  - Solicitation of participants
  - Notice to entire workforce soliciting upfront input
- **During the Event**
  - Leadership kickoff
  - Interim briefings
  - Real-time training
  - Final report-out
- **Post-Event**
  - Distribute and post results (event report)
  - Monitor process
  - Periodic team meetings
  - 30-day audit and report-out

**Keys to Success**

- Full time representation of all critical functions
  - Relieved of daily duties
- Once Kaizen Charter is finalized, no new team members added unless TEAM requests them
- No observers
- No more than 10 on Kaizen team
- No SMEs involved unless trained in Lean
- Start and end together – and on time
Kaizen Event “Do’s”

- Keep team in the room
- Keep the team well fed 😊
- Keep the team motivated
- Keep the team on task – *do it now!*
- Help the team keep perspective
- Use psychology – remember human nature
- Engage naysayers – use 5 why’s and “what if’s”
- Encourage “Yes, if…” thinking
  - Discourage “No, because…” and “can’t”
- Use brainstorming rules
- Require team to respect one another
- Celebrate the team’s success!

Kaizen Event “Don’ts”

- Avoid / minimize interruptions
- Avoid “kaizen creep” (expanding scope)
- Avoid under-training process users on new process steps
- Don’t underestimate the need to educate and sell, sell, sell new concepts – WIIFM (What’s In It For Me)?
- Don’t use Kaizen Events as a prelude to reductions in work force
Learning Objectives

- Learn why kaizen events in administrative environments need to be managed differently than in manufacturing environments
- Get an overview of the different stages and timing of office kaizen events
- Learn what some of the key tools are that are used in administrative Kaizen Events.
- Get pointers on how to improve your team’s ability to assure gains are sustained

Wrap-up

- Comments or Questions????
- For a free pdf file containing many kaizen event planning and execution templates, leave me your business card or drop me a note at http://mosterling.com/contact.php
Office Kaizen Event Resources
by Mike Osterling & Karen Martin

Lean Resources

- *The Complete Lean Enterprise*, Beau Keyte & Drew Locher
For Further Information

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