

KAIZEN METHODOLOGY

The word Kaizen is Japanese and means
"Continuous Improvement".

Kai =
Change

改善

Zen =
Good

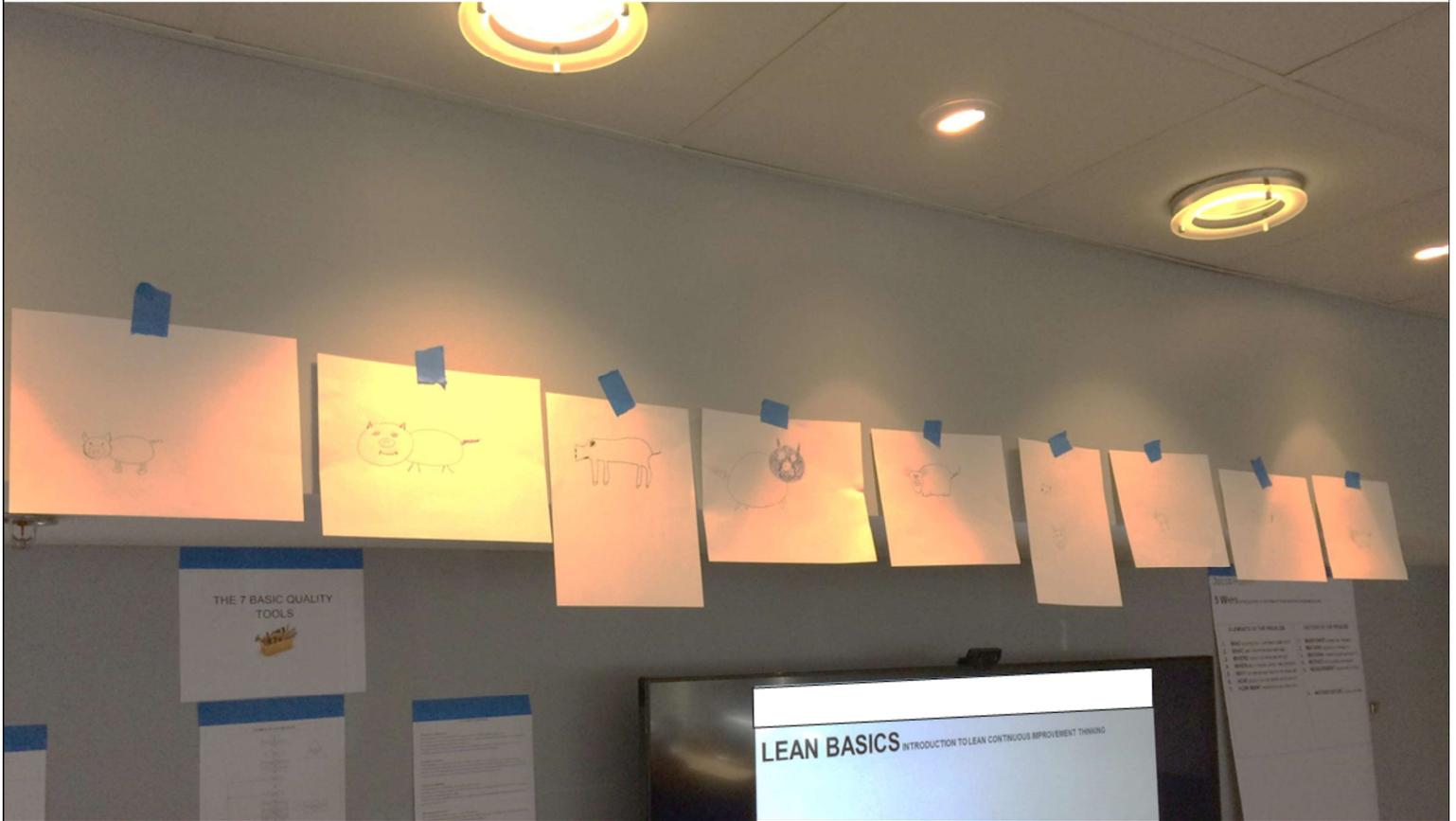
KAIZEN

Kaizen is another of the lean tools that I have taught extensively. Like 5S and 5 Whys it is probably the second most commonly used method that I have experience in. Kaizen events are artificial temporary teams of people brought together to examine a problem that cannot be done entirely by one person on his or her own.

Kaizen events should only be used if it is absolutely necessary. You want to avoid the temptation to do a Kaizen at every problem. This is problem solving that is running amok and detractors of Kaizen have labelled them 'Kamikaze Kaizens' There are many reasons for doing a Kaizen event and many reasons not to do a Kaizen event. Some people have even coined the term 'Point Kaizens' to focus on a single point to a problem or situation.

You are committing time, money and resources when you carry out a Kaizen event, so use them if under certain situations. Examples of when you might have to hold a Kaizen event might be a significant reduction or increase in demand for a manufactured product that will require the redesign of a manufacturing cell and everything else connected from the end to end process. In another case it might be a chronic quality problem that has defied all attempts at rectification and you have the ire of your end customers. If you have decided to commit to a Kaizen, then like Six Sigma you need a write a charter.

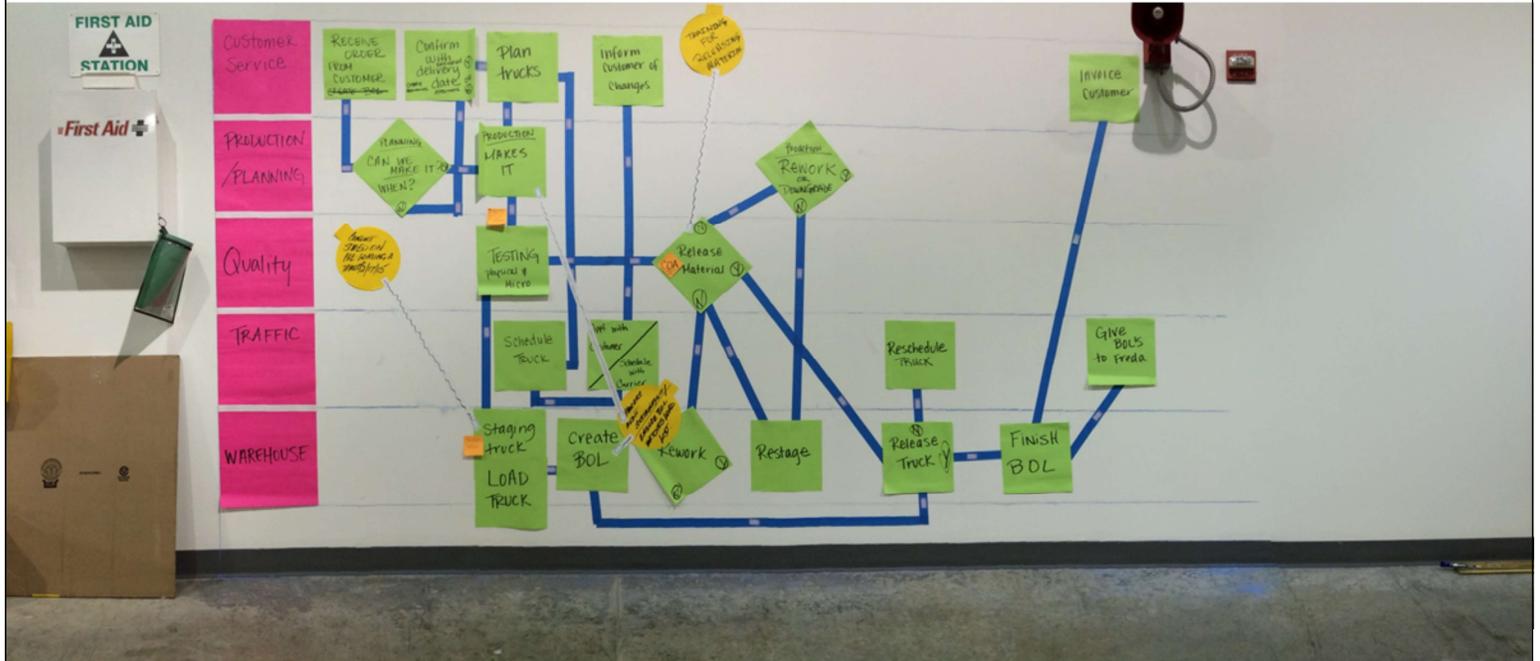
WARM UP EXERCISES & TRAINING FOR KAIZEN...



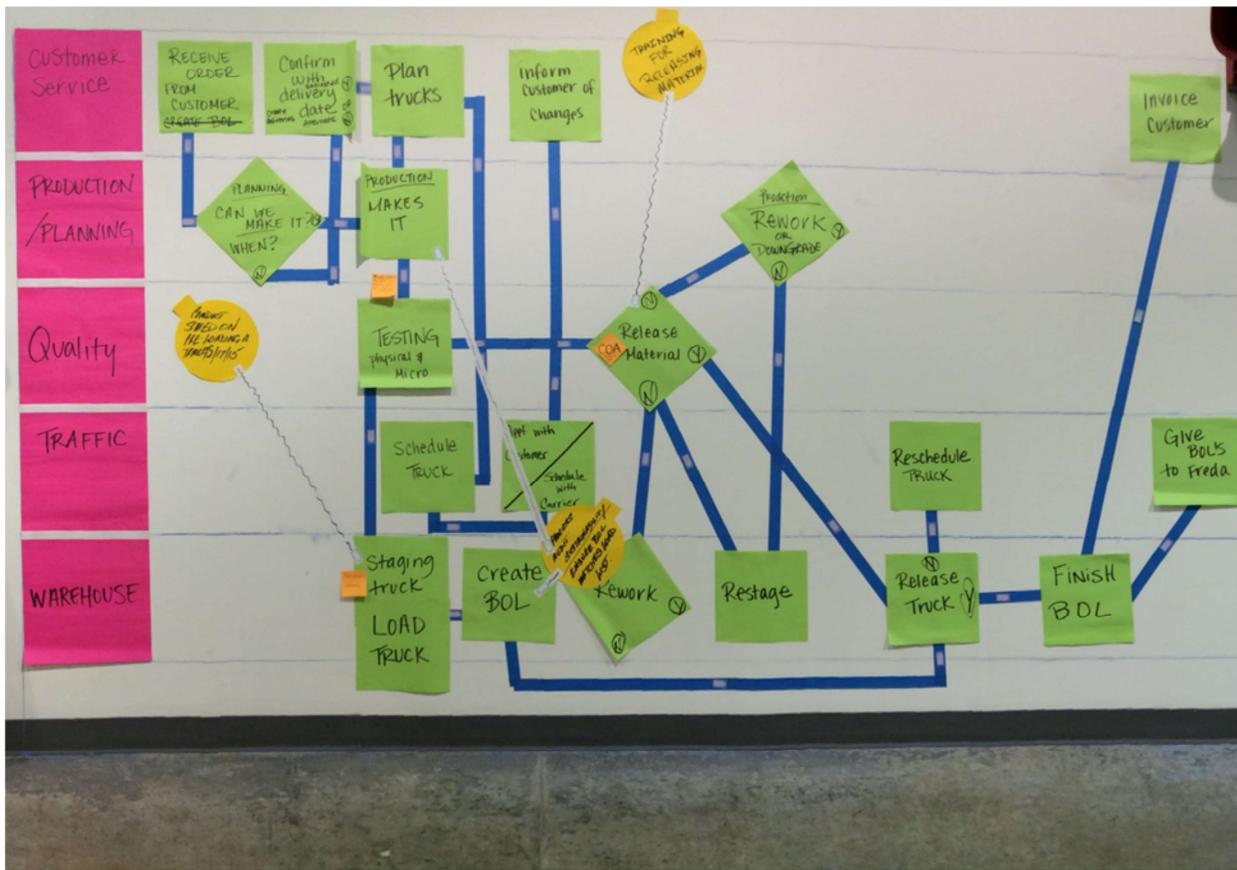
ASPECTS OF WAREHOUSING & LOGISTICS – WHAT SHOULD WE WORK ON?

- a. **In-bound out-bound shipping, scheduling, tracking, lack of visual management, outbound shipment delays resulting in detention fees**
- b. **Time and effort loading and unload truck trailers**
- c. **Remote warehouse organization**
- d. **Who are the vendors**
- e. **Freight costs**
- f. **Development of roles of team members**
- g. **Capacities**
- h. **Production load**
- i. **Level loading of truck loads**
- j. **What is production takt time?**
- k. **Level loading of truck loads**
- l. **Development of warehouse metrics**
- m. **Standard work establishment**
- n. **Flow of materials**
- o. **Flow of information**
- p. **Organizational structure**
- q. **Roles and job description**
- r. **Level deliveries**

KAIZEN TOOLS – SWIM LANES...



KAIZEN TOOLS – SWIM LANES...







MAIN AREAS OF ENQUIRY

- 1. QA Training Releasing Material:** If we increase the number of quality assurance technicians who are fully trained and qualified and know how to properly release finished goods this will keep outbound on time shipping times.
- 2. Process auditing:** As part of a quality system this process needs to be relooked for its accuracy fullness, content, frequency and current conditions to prevent production defects from passed on to the warehouse for shipment. Reworked and blocked packages need to resolved in a more timely manner and not the at the time of loading a truck.
- 3. Ensure BOL matches load list:** Need to review work instructions for how to create a bill of lading, develop reaction plans for discrepancies to prevent shipping errors and keep training records of effected who have been trained in a needed competency.
- 4. Conduct SMED on pre-loading a trailer:** We shall conduct a observation time and effort study on loading and unloading a truck trailer for possible improvements. Having a bar code scanner system with an integrated soft/firmware package to communicate within ADICOM would greatly improve accuracy and save time of manual entry.
- 5. Appointment times for outbound shipments:** There are benefits of having a schedule of appointment times for outbound shipments with better control of detention fees, better management of human resources allocations in the warehouse, working in a timeframe will improve between warehouse, production and quality assurance.

REPORTING – TRACKING – COUNTERMEASURES & METRICS

No	Countermeasure	Lead	Transfer
1a	Train additional Quality Technicians on how to release finished goods materials	CS	?
2a	Review process audits accuracy, fullness, content, frequency and current conditions	MH ML	?
3a	Develop standard work process to ensure BOL Matches Load List	RS	TM
4a	Install bar code scanners system for point of use BOL transactions	RS	?
5a	Establish scheduled carrier appointment times for in-bound and out-bound shipments	FS	?
6a	Establish a recordable, varifiable lost time keeping method that tracks ship delays	RS	?
7a	SMED analysis on the loading and unloading of truck trailer	FW	FW
8a			
9a			
10a			
11a			
12a			

	Timeline Months 2016					Metric (DPM, A3, OEE, SQDC)	Owner	Started	Completed
	7-Jan-16	30-Mar-16	1-May-16	1-May-16	1-Apr-16				
1a						Reduction in wait time for FG release	CS	1/1/2016	
2a						? Needs a metric	MH ML		
3a	X					Warehouse training records, number of errors	TM	1/1/2016	
4a		X				Ontime shipments - in full - on time	RS	1/1/2016	
5a			X			Carriers Meeting the appointment times	FS	1/1/2016	
6a				X		Request to release to ship lost time delays	RS	1/1/2016	
7a				X		Before and after SMED time studies	FW	1/1/2016	
8a									
9a									
10a									
11a									



4. Conduct SMED on pre-loading a trailer. We conducted at



FINAL EXAMS...



MOVING FORWARD ➔ F.R.A.C.A.S. & KAIZEN

RCA CAR PROBLEM SOLVING A3 **Jacob Holm**

I. Problem statement and business case - Why are we talking about this?
 I.1. How to prevent "What is your wish?"

II. Current condition


 Microsoft Excel
 Worksheet

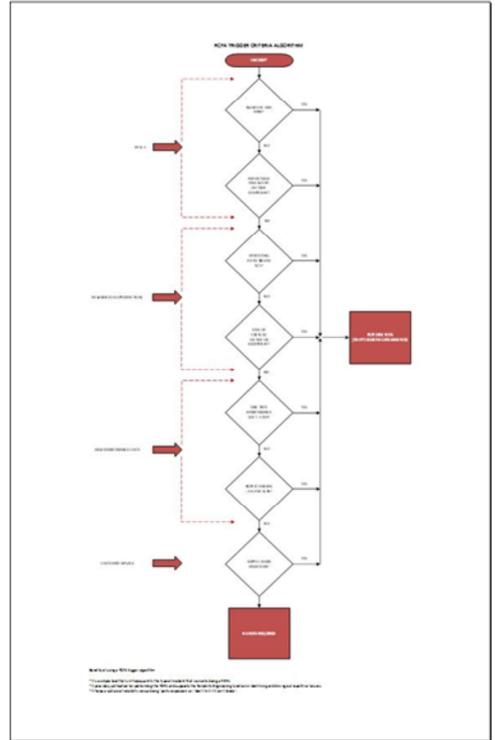
III. Target Condition:

IV. Improvement Metrics/Targets/Savings - How will we measure the improvement?

Approvals

Sign-offs to Ensure Full Commitment to Resources and Support					
Team leader	Customer	Customer sponsor	Supplier	Supplier sponsor	Project sponsor


 Microsoft Excel
 Worksheet

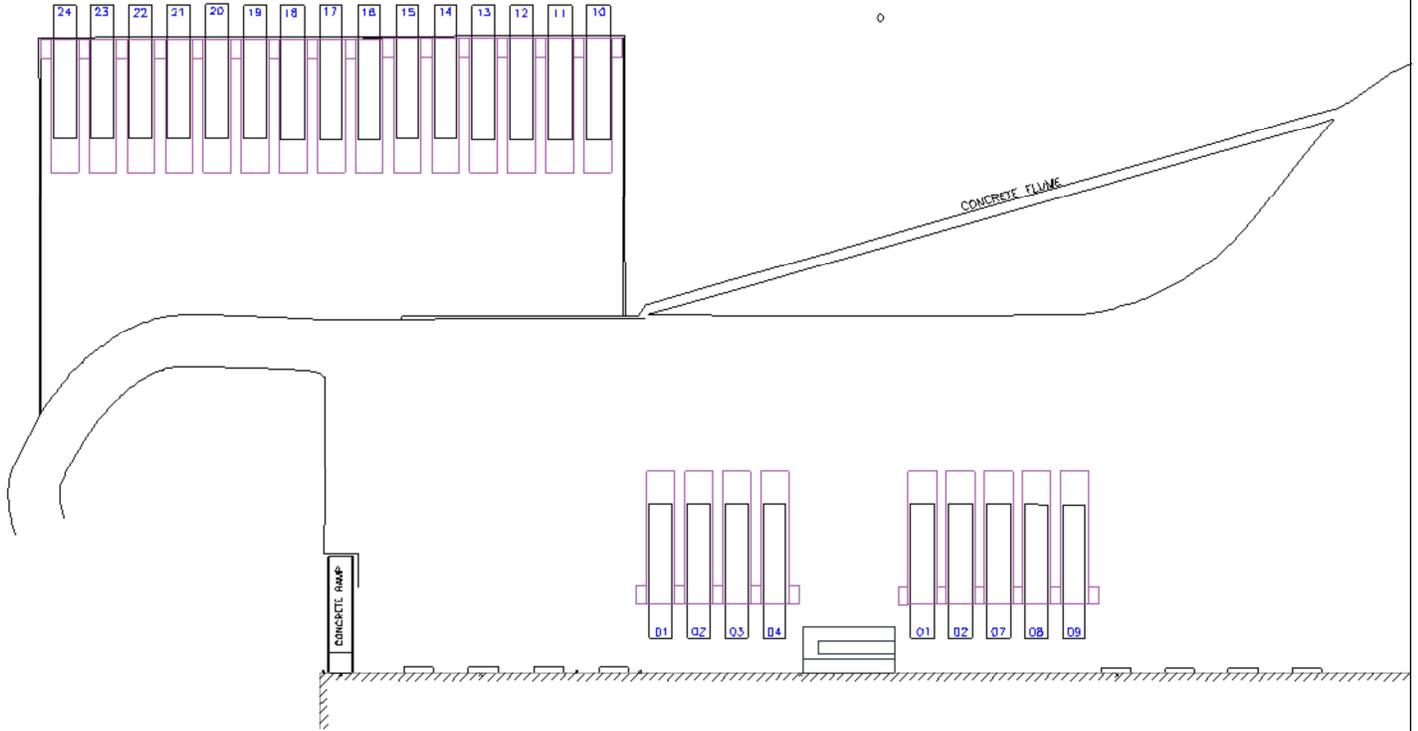


The screenshot shows the QIMacros website interface. At the top, there is a navigation bar with links for Home, Chat, Contact, and phone number 888-468-1537. Below this is a menu with categories: QI Macros, Key Tools, Training, Lean Six Sigma, Support, FREE Resources, Store, and Order Now. The main content area is titled "SPC Software for Excel" and includes a sub-header "It's Easy to Create SPC Charts With QI Macros Add-in for Excel". A three-step process is illustrated: 1. Point (selecting data in an Excel spreadsheet), 2. Click (clicking the QI Macros menu in the Excel ribbon), and 3. Analyze & Improve (viewing various SPC charts like Control Chart, Pareto Chart, Histograms, etc.). To the right, there is a "Control Charts & Histograms in Seconds FREE 30-day Trial" section with a form for user registration (First, Last, Email, Company, Phone) and dropdown menus for "For" and "Interest". Below the form is a "Download 30-Day Trial Now!" button. Further down, it states "Join 100,000+ Users in 80 Countries" and shows a "CRET editors' rating" of five stars. A blue button labeled "SPC Tools for Excel" is also present, with a list of tool categories below it: Control Charts, Histograms with Cp, Cpk, Pareto Charts, Ishikawa/Fishbone Diagrams, Probability Plots, Scatter Diagrams, and Competitor Comparison. The bottom of the page shows a Windows taskbar with icons for Start, Internet Explorer, File Explorer, PowerPoint, and Chrome, along with the system clock showing 4:26 PM on 1/5/2016.

WORK IN PROGRESS – ON-GOING WAREHOUSE PROJECTS FOCUS ACTIVITIES

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TRUCK TRAILER POOL MANAGEMENT



TRUCK TRAILER POOL MANAGEMENT

