Standard Work & Daily Accountability

Situation

- Company Largest Customer is Unhappy
- CEO has been summoned to a meeting
- Service Rate is 5 points from acceptable level
- Safety Performance is out of control over 18 TIR
- Quality issues abound
- Leadership expressed why we in Retail Business
- Everyone has an opinion and suggestions
- Vendors are not good business partners
- Morale is low, conflicts are everywhere

KPIs Retail Supply Chain

	2007	2008	2009	2010	2011	
Environmental Health & Safety Lost Time	18 2	7 0	5 2	4 0	1 0	
Quality T1	89%	96%	96.79%	97%	98.3%	
Service Rate	94.6	99.4	99.6	99.8	99.4	
Lead Time Days	5.6	3.1	3.00	2.56	2.6	
Supply Chain Cost as Percent of Sales	+4% YOY	-6% YOY	-1.5% YOY Economy Crash	+1.2% YOY	-.4% YOY	
Schedule Att.	79%	84%	88%	87%	92%	
Direct Labor Efficiency	63%	83%	115%	*114%	120%	
Uptime	36%	71%	83%	80%	85%	

What to do?
Where to start?

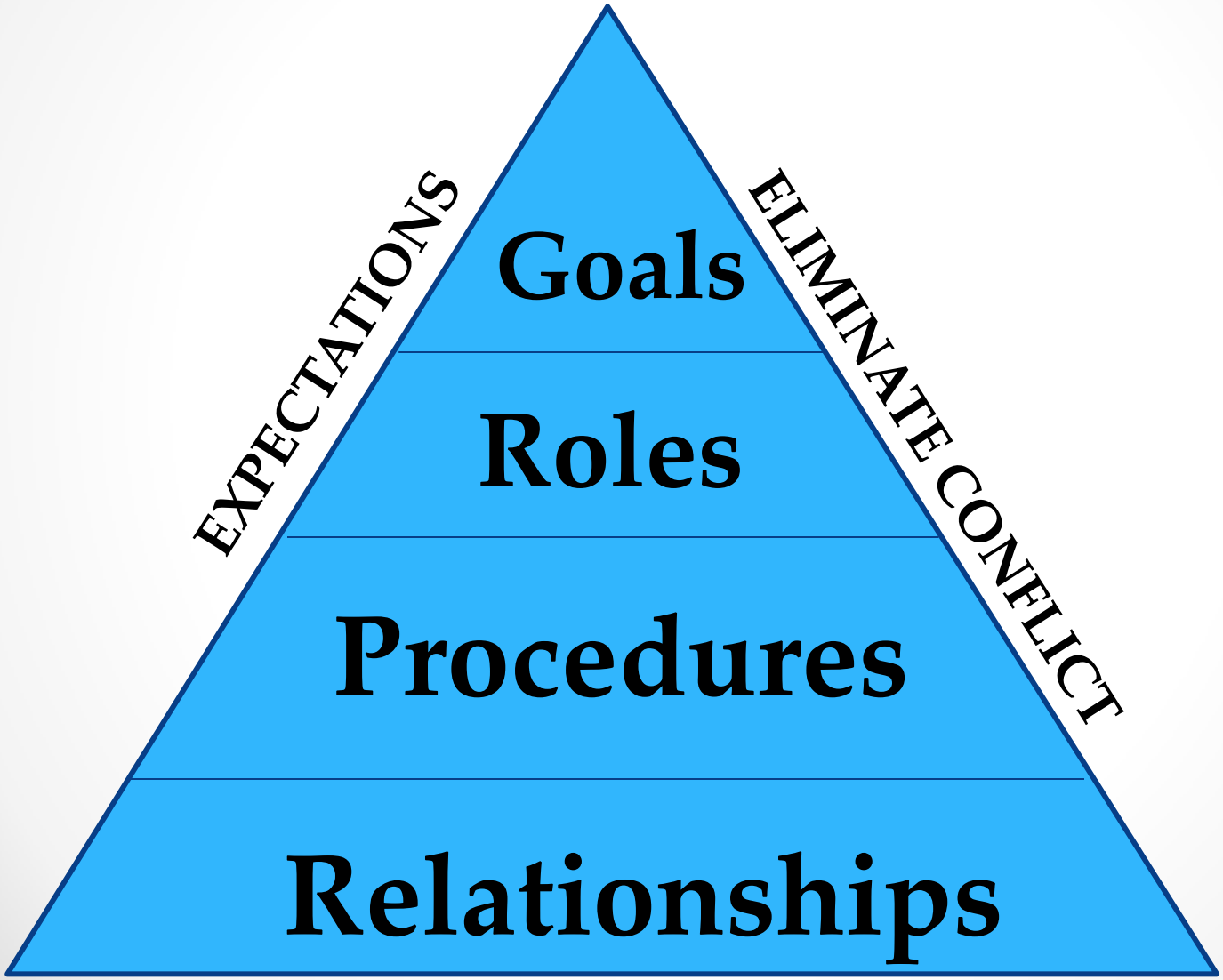
Contents

- Situation
- Leadership Standard Work
- Visual Management
- Daily Management/Accountability
- KPI
- Q&A

Four key ingredients

- **Leadership Standard Work**
  - Running the business
  - Improving the business
  - What we are going to do & NOT do!
- **Visual Controls**
  - At-a-glance process status
- **Daily Accountability**
  - Tiered meetings
  - Gemba Walks
- **Discipline**
  - Walking the talk
  - Continuous Assessments

Gemba Focus


EXPECTATIONS
ELIMINATE CONFLICT
Goals
Roles
Procedures
Relationships

make the difference

"ZBS Implementation"

Ricky Samples, Randy Eubanks and Jeremy Padgett

Line 4 SMED Team

Ricky, Randy and Jeremy recently led a SMED event on line 4 in an effort to reduce changeover time. The team identified an opportunity to reduce changeover time by 25% (60 to 45 minutes) and walking steps by 63%. The team successfully used ZBS tools in an effort to help us continuously improve.

make the difference

Chris Odell

Forklift Driver

"Mistake Proofing"

Chris recently noticed that some bottles were packed in the wrong box and communicated this error to Supervision. His timely communication enabled us to fix the problem and not ship the customer the wrong product.

make the difference

"Eye on Quality"

Marcus Craig

Assistant Line Operator

Marcus paid attention to detail and noticed that some labels had the wrong metric conversion. When he noticed the error, he didn't proceed with labeling the bottles which prevented our department from having to do a lot of rework.

The Top 4 of 5 Drivers

of Employee Engagement

Connection between work and organizational strategy

Understanding of how to complete work projects

Importance of job to organizational success

Internal communication

Leadership Standard Work

- Everyone knows what to do and also what NOT to do
- Standard work by Role and Situation

Leader Standard Work

Role

- Plant Manager
- Value Stream Manager
- Safety Leader/Team
- Hazardous Response Team
- Operator, Cell Leader
- Maintenance Mgr.
- Logistics Manager
- Planner

Situational

- Daily, Weekly, Monthly, Annually
- Business Continuity
- E, Q, D, C
- Kaizen Events
- Union Activity
- Celebrations
- Gemba Walks
- KPI Standup Meetings

The Plan

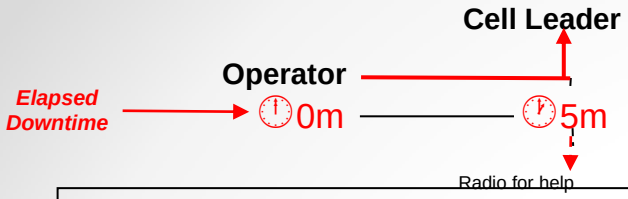
- Lean Boot Camps
  - Leadership Standard Work
  - Standard work
  - Daily Management
  - Train and observe the Gemba
  - Assess Progress
- Daily Management
- Value Stream
- Kaizen
- One Minute Kaizen…Good Ideas Board
- Chase the Waste Out of Here!
- Celebrate …Celebrate…Celebrate!!!!!
-

Event	Shift Leader	Supervisor	Lean Mgr.	Maintenance Manager	VS Managers	Plant Manager	EH&S Manager
Shift Meeting	Daily	Daily	Rotate Daily	Daily M	Daily Rotation	Weekly	Daily
Cell KPI Review	Daily	Daily	Daily	Daily	Daily	Daily	Daily
Hourly Count Boards	Hourly	Hourly	Two Hours	Every Four Hours	Two Hours	Four Hours	Every Three Hours
9:30 Strategy Meeting	AS Needed	Lead Daily	Daily	Daily Leads Thursday Planning Mtg	Daily	Daily	Daily
VS/Dept KPI Meeting	Weekly	Weekly All Shifts	Weekly All Shifts	Weekly	Weekly All Shifts	Weekly All Shifts	Weekly
Root Cause Documentation	Hourly	Hourly	Daily	Daily	Weekly	Weekly	Weekly
KPI Board Assessments	Reviews	Close Gap	Weekly (owner)	Support Close Gaps	Weekly	Weekly	Weekly
Stop Start Continue		Quarterly		Quarterly	Quarterly	Quarterly	
Kaizen	Monthly	Bi Monthly	Weekly	Support	Bi Monthly	Bi Monthly	Monthly
Monthly Townhall	Support	Support	Kaizen Recognition Visuals	Set-up	EQDC Recognition MTD	Recognition MTD Business Review	Safety Recognition (owner)
Safety Townhall	Support	Planning	Support	Visual	VSM Recognition	Site Recognition	Leads Vision

Notification Guidelines

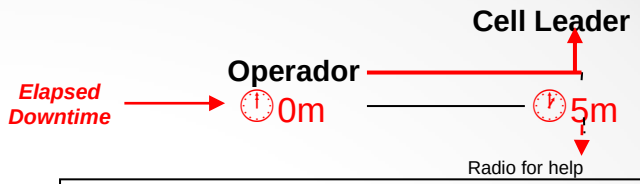
These are notification guidelines for the plant manager and or the department level manager in the event of certain situations. Remember, Safety first! The preservation of life then assets is the priority expectation prior to a notification call. Also, be considerate of blindsiding your immediate manager. Therefore, in many situations your immediate manager notification will parallel or occur prior to notifying the Plant Manager. We will update this list and the priority as needed.

Situation or Issue	Immediate Plant Mgr	Next Day	Week of	Ops Dept Mgr	WeekPrior
Any Regulatory/Govt. Agency Visit	X			X	X
Safety Recordable/ Serous Near Miss	X			X	
Death of an associate	X			X	
Impending Discipline or Termination	X			X	
Death of an associate's of Family Member	X	X		X	
SD Executive or HQ team member visit	X			X	
Union activity or campaign	X			X	
Downtime more than 60 minutes or equivalent cases	X			X	
First Aid		X			
Signs of associate frustration		X	X	X	
Significant Customer Service issue	X			X	
Accusation of Harassment, Racism, Sexism, Threats, Fighting	X	X		X	X
Sickness, Hospitalization of associate's family member		X	X	X	X
Records, Celebrations & /or achievement		X	X		X
Resignation of an associate		X		X	
Significant achievement of associates or team celebration		X	X		X
News media contact (Do not make any public statements)	X			X	
Significant spill or EPA violation	X				
Minor Spill		X	X	X	
Continuous Improvement events			X		X
Serious Quality Hold (5K or recall potential)	X				



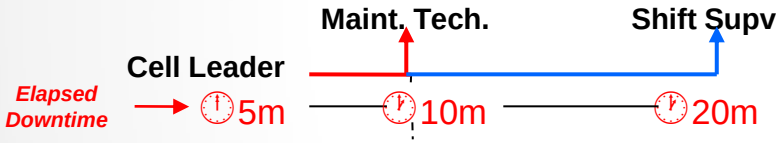
Operator

- Timely response to the issue.
- Troubleshoot
- After 5 minutes troubleshooting (5 minute mark) call Cell Leader
- At 10 minute mark generate a work order.
- Maintain the operation of neighboring systems.
- Stay with equipment and assist in repairs until issue is resolved.



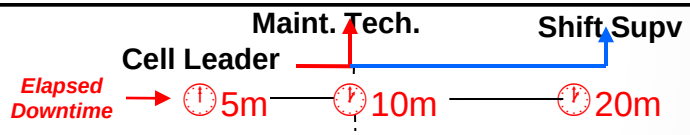
Operador

- Responda lo mas pronto posible.
- Intente correjir la falla.
- Después de 5 minutos de intentar de localizar fallas llame al Cell Leader.(Haga nota de los 5 minutos).
- Despues de 10 minutos genere una orden de trabajo.
- Mantenga la operación de sistemas vecinos.
- Permanezca con equipo y participe en reparaciones hasta que asunto sea resuelto.



Cell Leader

- Timely response to call for help
- Troubleshoot
- After 5 minutes troubleshooting (10 minute mark) call Maint Tech.
- At 20 minute mark, call Shift Supervisor with recommendation
- Continue to support the operation of the assigned area.
- Allocate resources.
- Check standard work and update best practice/ISO docs if necessary.

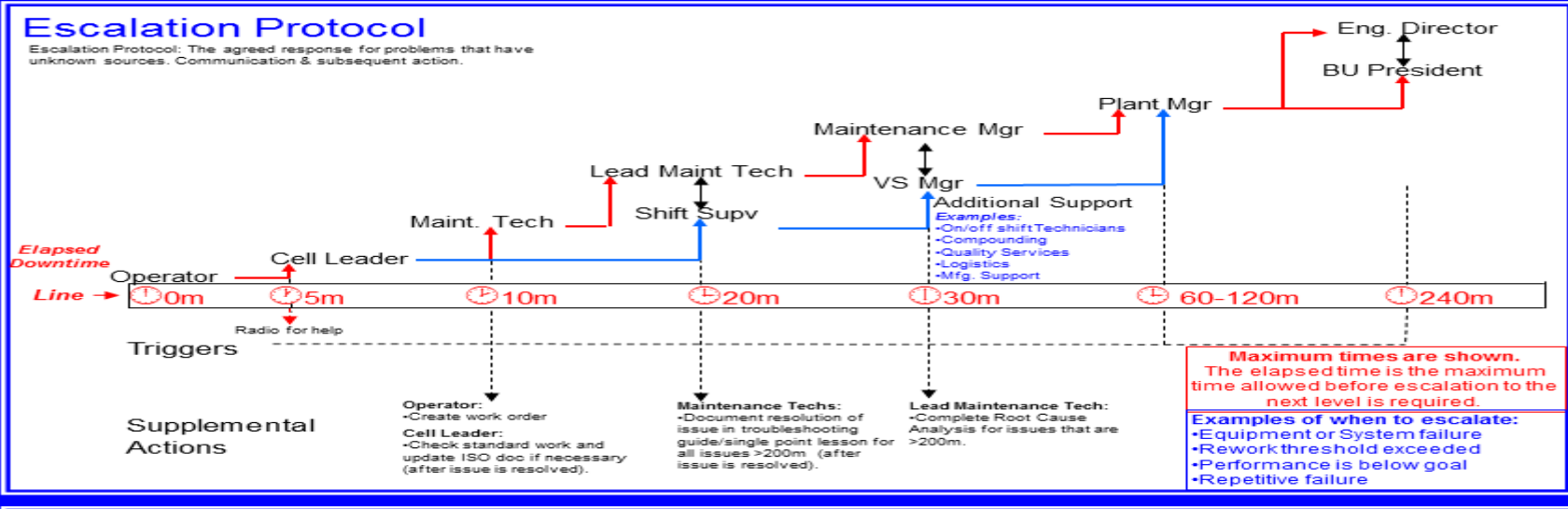


Cell Leader

- Pida ayuda lo mas pronto posible
- Intente correjir la falla.
- Despues de 10 minutos de intentar de localizar la falla llame al mecanico.
- Despues del transcurso de 20 minutos, llame al Supervisor y dele una recomendación.
- Continúe apoyando la operación del área asignada.
- Asigne recursos de otros departamentos.
- Verifique el trabajo estándar Y actualize la mejor practica/ISO documentos si es necesario.

Escalation Protocol

Escalation Protocol: The agreed response for problems that have unknown sources. Communication & subsequent action.



Escalation Protocol
Roles and Responsibilities

Operator	Cell Leader	Maintenance Tech	Lead Maint. Tech	Maintenance Mgr	Engineering Director
•Timely response to the issue. •Troubleshoot •After 5 minutes troubleshooting (5 minute mark) call Cell Leader •At 10 minute mark generate a work order. •Maintain the operation of neighboring systems. •Stay with equipment and assist in repairs until issue is resolved.	•Timely response to call for help •Troubleshoot •After 5 minutes troubleshooting (10 minute mark) call Maint Tech. •At 20 minute mark, call Shift Supervisor with recommendation •Continue to support the operation of the assigned area. •Allocate resources. •Check standard work and update best practice if necessary.	•Timely response to call for help •Troubleshoot •After 10 minutes (20 minute mark), call Lead Maint. Tech •Close work order when issue is resolved. •Document resolution of issue in troubleshooting guide/single point lesson for all issues >200m (after issue is resolved).	•Timely response to call for help. •Assist Technicians in diagnosing the issue. •After 10 minutes (30 minute mark), call Maintenance Manager •Document resolution/status at the shift end review	•Evaluate the situation with the Value Stream Manager •Allocate maintenance resources across the site. •Oversee the escalation process. •At 120 minute mark, call Plant Manager	•Evaluate the situation with the Business Unit President •Allocate maintenance and engineering resources across the company •Oversee the escalation process. •At 240 minute mark, call the Business Unit President

Shift Supervisor

•Oversee the escalation process.
•Evaluate the situation and prioritize activities.
•Allocate resources across the department
•After 10 minutes (30 minute mark), call the Value Stream Manager.

Value Stream Manager

•Oversee the escalation process.
•Evaluate situation with Maintenance Manager and prioritize activities.
•Allocate resources across the Value Stream.
•At the 120 minute mark call the Plant Manager.

Plant Manager

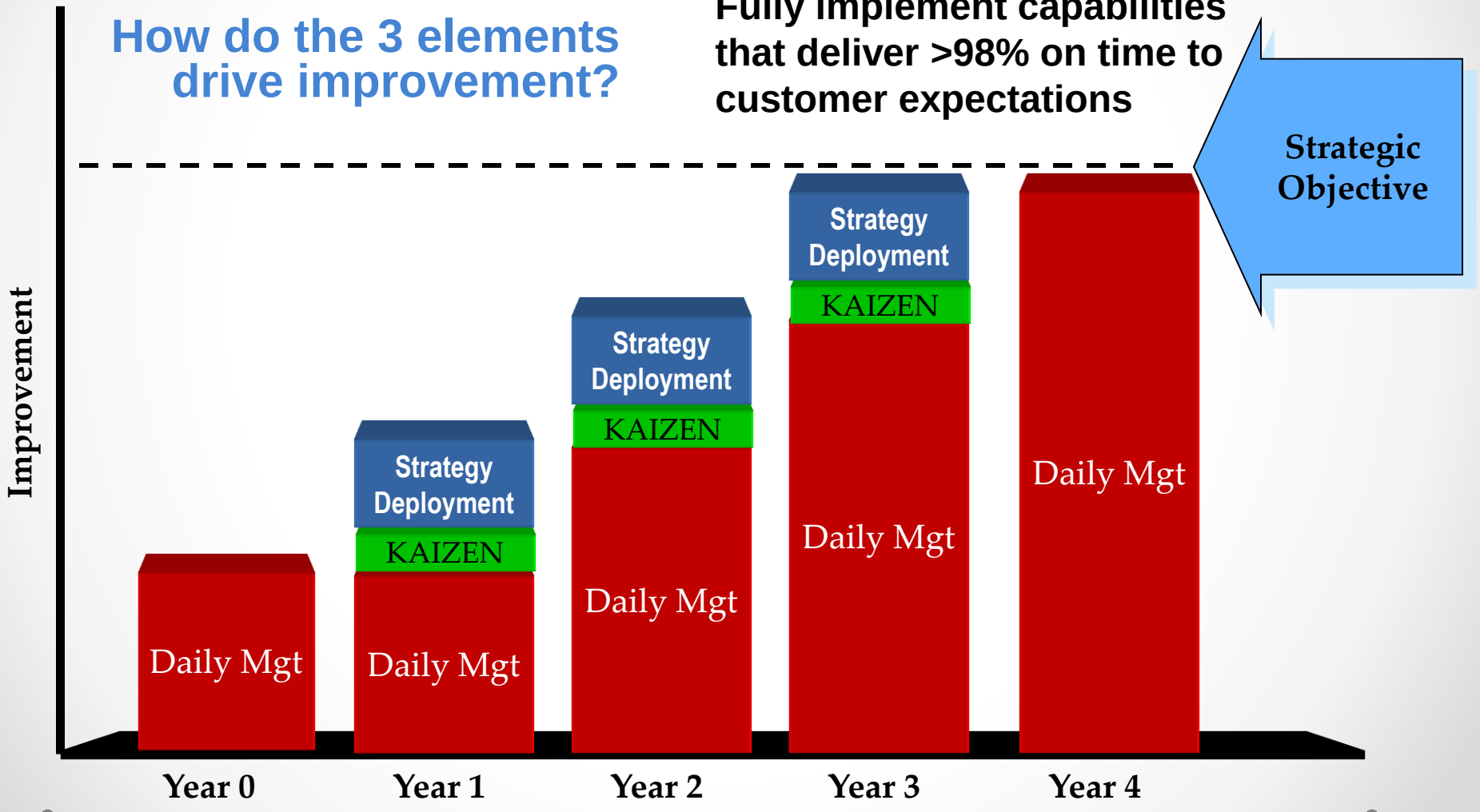
•Oversee the escalation process.
•Evaluate the situation and prioritize activities.
•Allocate resources across the site.
•At the 240 minute mark, call the BU President and Director of Engineering

Business Unit President

•Evaluate the situation with Director of Engineering
•Allocate resources across the site.
• Ensure resource are available during the escalation process.

How do the 3 elements drive improvement?

Fully implement capabilities that deliver >98% on time to customer expectations



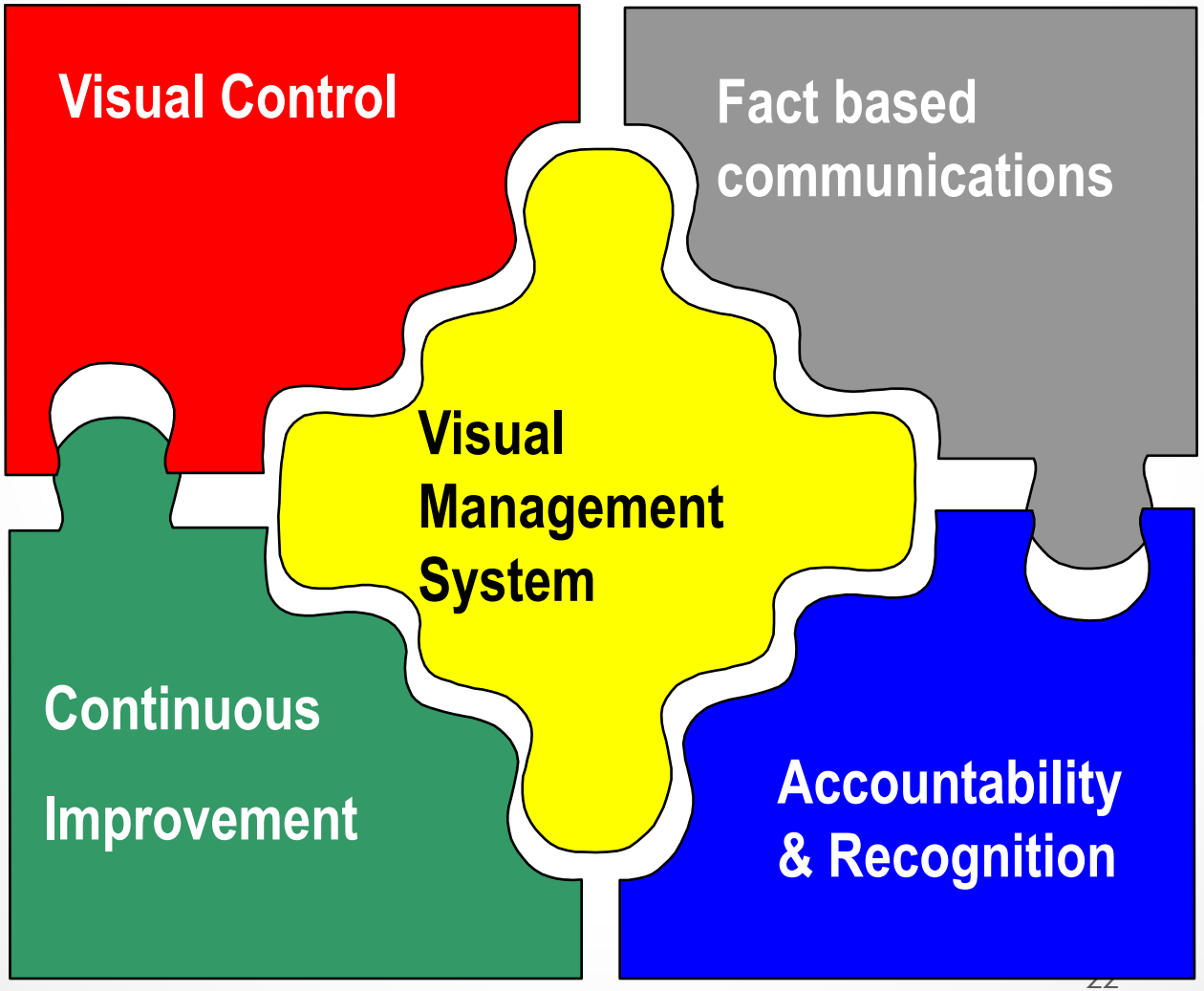
What's the Score?

Winning teams always know the SCORE!

Creating a Lean Culture

- Culture is “what we do around here”
- Lean culture is established by Lean management

Visual Management System



Why VMS?

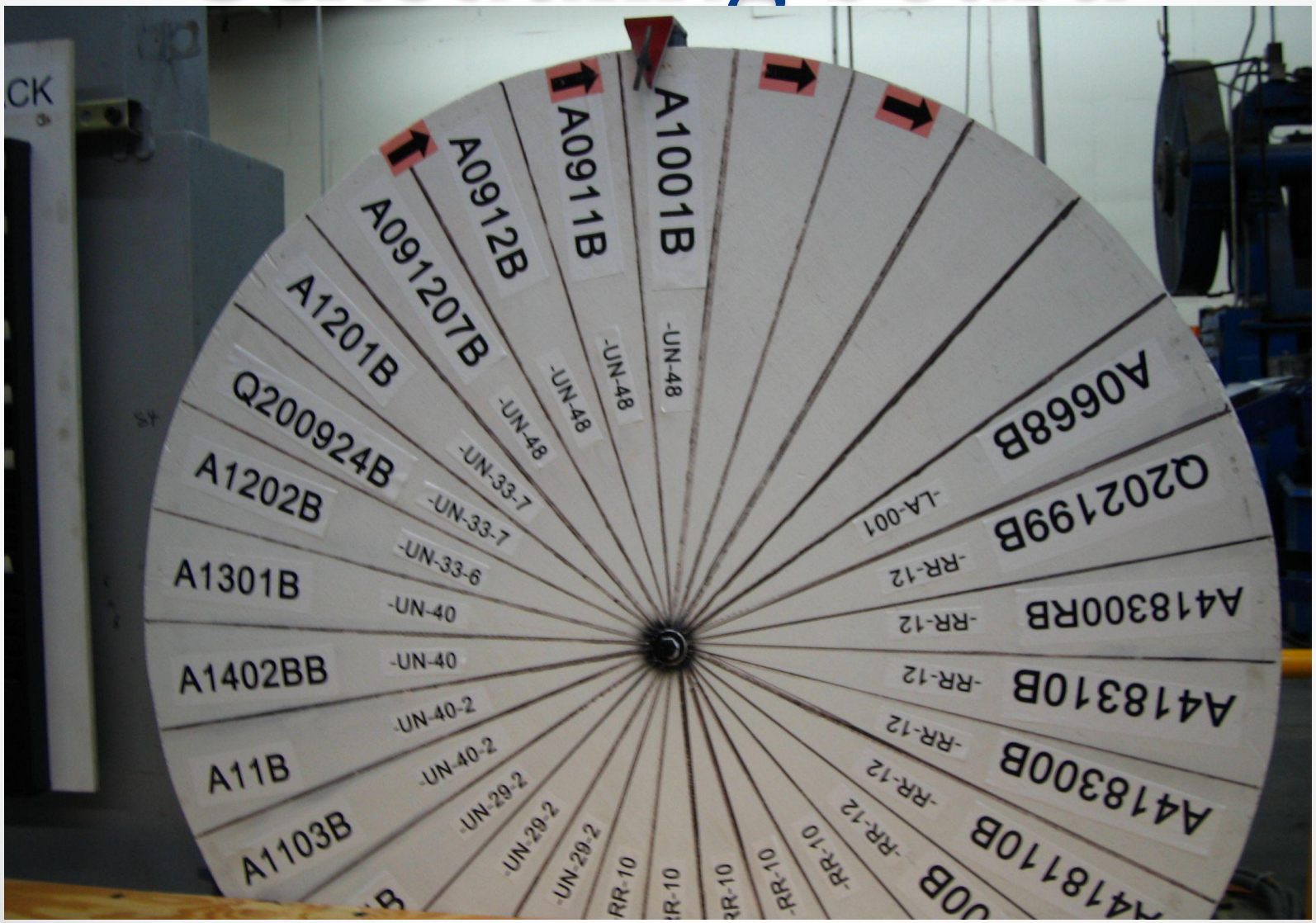
- Communication vehicle that drives Employee Engagement
- Current data drives decisions (not only historical)
- Puts decision making where the work is
- Moves from having only "specialists" understand to an environment where everyone understands!

Visual Controls

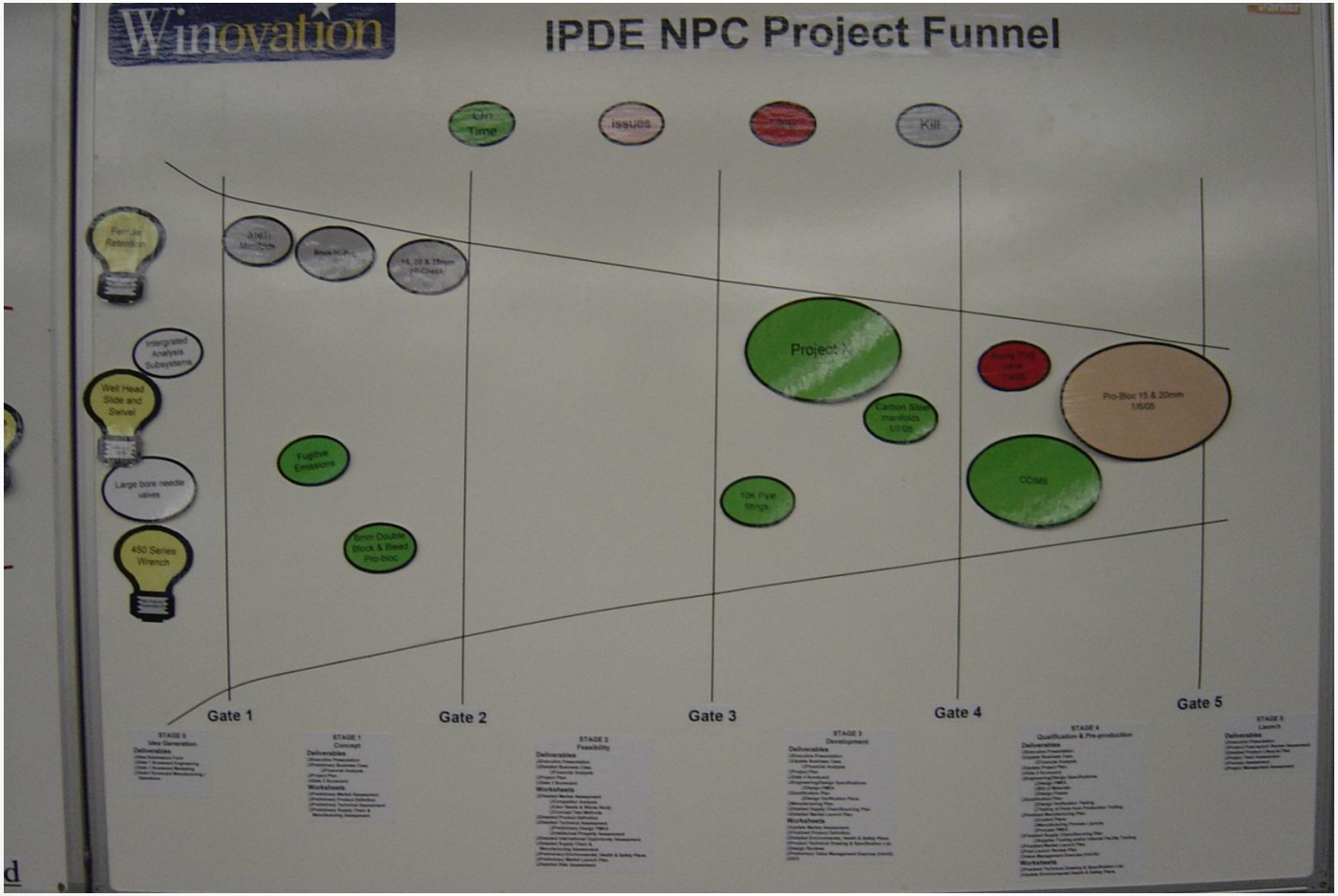
- Simple
- Straightforward
- At a glance
- Easily audited and diagnosed

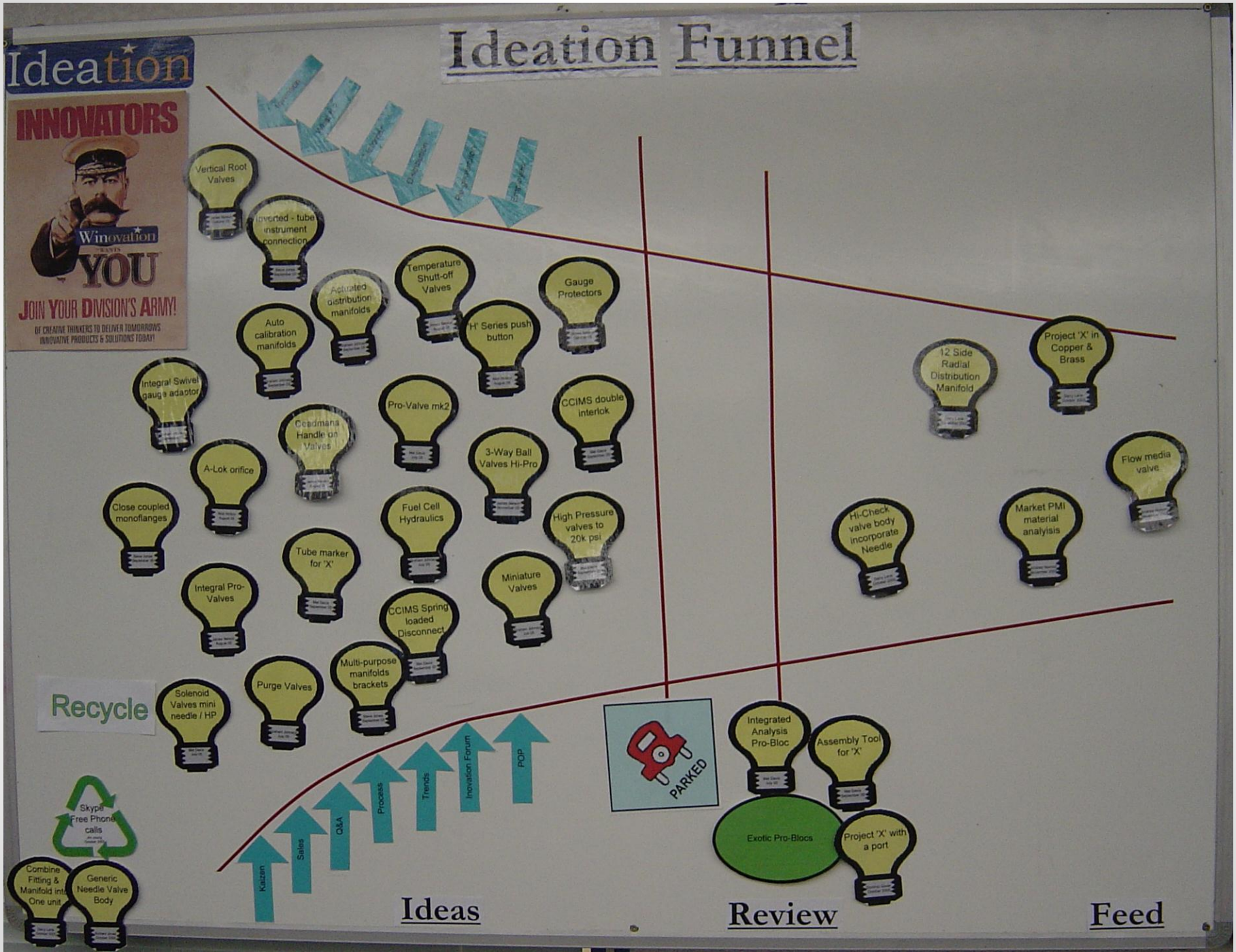
As raw material is withdrawn, a Kan-Ban signal is sent to the supplier for replenishment

Scheduling board



Work Instructions


Winovation
IPDE NPC Project Funnel
Kill
Ferrule Retention
Integrated Analysis Subsystems
Well Head Slide and Swivel
Large bore needle valves
450 Series Wrench
Fugitive Emissions
5mm Double Block & Bleed Pro-bloc
Project X
Carbon Steel manifolds
10K Pipe fittings
CDMS
Pro-Bloc 15 & 20mm
Gate 1
Gate 2
Gate 3
Gate 4
Gate 5


Ideation Funnel
Ideation
INNOVATORS
Winovation WANTS YOU
JOIN YOUR DIVISION'S ARMY!
Vertical Root Valves
Inverted - tube instrument connection
Temperature Shutt-off Valves
Gauge Protectors
Actuated distribution manifolds
Auto calibration manifolds
'H' Series push button
Integral Swivel gauge adaptor
Pro-Valve mk2
CCIMS double interlok
Deadmans Handle on Valves
3-Way Ball Valves Hi-Pro
A-Lok orifice
Close coupled monoflanges
Fuel Cell Hydraulics
High Pressure valves to 20k psi
Tube marker for 'X'
Miniature Valves
Integral Pro-Valves
CCIMS Spring loaded Disconnect
Multi-purpose manifolds brackets
Purge Valves
Solenoid Valves mini needle / HP
Recycle
Skype Free Phone calls
Combine Fitting & Manifold into One unit
Generic Needle Valve Body
Kaizen
Sales
Q&A
Process
Trends
Inovation Forum
POP
PARKED
12 Side Radial Distribution Manifold
Project 'X' in Copper & Brass
Flow media valve
Hi-Check valve body incorporate Needle
Market PMI material analyisis
Integrated Analysis Pro-Bloc
Assembly Tool for 'X'
Exotic Pro-Blocs
Project 'X' with a port
Ideas
Review
Feed


E
F


19
RECHARGE
OVERCHARGER
kPa 0
PSI 0
2070
300
M
USE WITH DRY CHEMICAL ONLY
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Can you spot the problem?


5S
SIMPLIFY
STRAIGHTEN
SCRUB
STABILIZE
SUSTAIN
8 Types of Waste
WAREHOUSE AREA ENV & SAFETY COORDINATORS
OSHA
OSHA
10/04/2011

The CEO is Coming!!!

March 2008

POWDERS LINE 16

5S BLITZ

FEB. 12 – FEB. 19

TEAM

Jeremy Padgett
Shane Bohannon

Special Thanks To Our Maintenance Team!!!

5S Assessment

LINE 16

- **SIMPLIFY** LEVEL 0
- **STRAIGHTEN** LEVEL 0
- **SCRUB** LEVEL 0
- **STABILIZE** LEVEL 0
- **SUSTAIN** LEVEL 0
- **TOTAL POINTS** 0

- **AVERAGE SCORE** **0**

P16 5s

Dates	1/21/08	Cost Center	
Location	Emerson	Associated VSM	Kevin Singletary
ABS Contact	Jake Simpson	Process Owner	Jeremy Padgett
Tool/Method	5s	Resource	Jake Simpson
BTO/AIP/KPI			

Business Case /Strategic Alignment

1) The current 5's score for P16 0 with a goal of 3.0 by end of year. Applying color scheme, red tagging, & scheduling will reduce clutter, improve organization, & assure cleaning of t

Opportunity

Target/Goal

- Improve 5s score from 0 to 2

Scope

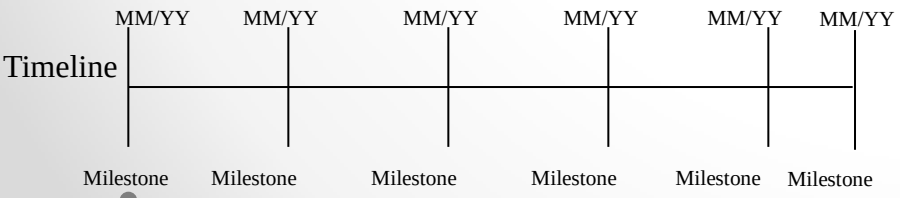
In	Out
•5s score	• Standard Work

Deliverables

- Improve 5s score from 0 to 2.0 on P16
-

Team

Jeremy Padgett	
Shane Bohannon	



Mixing Area

BEFORE

AFTER

Shadow Boards for Tooling & Cleaning

BEFORE

AFTER

DuPont's Positive Feedback

Standing Platforms

BEFORE

AFTER

5S Assessment

LINE 16

- **SIMPLIFY** LEVEL 2
- **STRAIGHTEN** LEVEL 3
- **SCRUB** LEVEL 2
- **STABILIZE** LEVEL 0
- **SUSTAIN** LEVEL 0
- **TOTAL POINTS** 7

- **AVERAGE SCORE** 1.4

Outcomes

- Identified what tooling & parts were needed
- Created shadow boards & relocated to needed area
- Organized and segregated parts for Dupont & Enforcer
- Removed redundant equipment

Next Steps

- Develop 5S Schedules
  - Area Map
  - Duties
  - Responsible Persons
- Complete color scheme
  - 2 tables
  - Flooring inside cell

Hr By Hr

PRESS NOS SCOREBOARD		1	2	3	4	5	6	7	8	9	10	RESULTS
7-11 M	GOAL	100	100	100	100	100	100	100	100			800
	ACTUAL	177	177	177	177	177	177	177	184			1423
T	GOAL	100	100	100	100	100	100	100	100			800
	ACTUAL	117	117	117	117	117	117	117	127			940
7-6 W	GOAL	100	100	100	100	100	100	100	100			800
	ACTUAL	212	212	212	212	212	212	212	216			1700
7-7 TH	GOAL	100	100	100	100	100	100	100	160			800
	ACTUAL	129	129	129	129	129	129	129	123			1026
7-8 F	GOAL	100	100	100	100	100	100	100	100			800
	ACTUAL	200	200	200	200	200	200	200	250			1650
7-9 S	GOAL	100	100	100	100	100	100	100	100			800
	ACTUAL	236	236	236	236	236	236	236	238			1890

Shadow Boards

Liquids Line 5
Standard Work Revision

February 22, 2008

Team

(L to R) Marcus Kister, Stacey Brideau, Trexia Wells
Kandy Brown, Fausto Pastor

L5 Standard Work Revision

Dates:	**2/5-2/6/; 2/21/08**
Value Stream:	**Liquids**
Location:	**Emerson**
ZBS Tools:	**Standard Work**

TEAM MISSION

Takt Time was calculated for Line 5 using incorrect demand data, leading to incorrect labor/equipment requirements. We have compensated for increased equipment capacity with extra labor. The Standard Work does not reflect true Takt Time, Cycle Times, or Manning requirement.

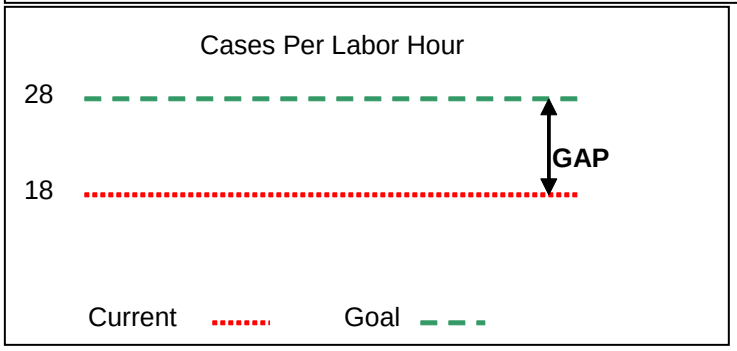
IN SCOPE: Liquids Line 5 Manufacturing Process

OUT OF SCOPE: All other areas Change Over Process

MEASUREABLE TARGET/GOAL

	CURRENT CONDITION	END OF KAIZEN	PERCENT IMPROVEMENT	30 DAY RESULTS	60 DAY RESULTS	90 DAY RESULTS
Productivity – Increase of 10 Cases/Labor Hour by 2/29/08	18	28	??%	??%	??%	??%
Standard Work Assessment – Achieve min. 1.0 by 2/22/08	0	1.0	??%	??%	??%	??%
Skill Flow – Achieve 100% cross training by 3/14/08	??	100%	??%	??%	??%	??%

THE "GAP"



END OF EVENT DELIVERABLES

1. Standard Work Playbooks for 3,4, and 5 operators
2. Standard Work Audit Schedule

NEWSPAPER ITEMS

Item Description	Target End Date	Responsible	Complete Status 25/50/75/100%
1. Train Stakeholders			
2. Standard Work Audits			
3.Skill Matrix			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

TEAM MEMBERS

1.PROCESS OWNER – Marcus Kister
2.ZBS CONTACT – Jake Simpson
3.TEAM LEADER – Marcus Kister
4.CELL LEADER – Ann Wells
5.LINE OPERATOR – Kandy Brown
6.LINE OPERATOR – Stacy Brideau
7.LINE WORKER – Fausto Pastor
8.PLANNING – Roxana Debernardi

Observations/ Strategy

Our Observations

- **Standard work obsolete**
- **Too much staff idle time**
- **Inconsistencies between job functions**
- **Incorrect Takt Time**

Our Strategy

- Time Observations
- Determine New Takt Time
- Create New Standard Work Documents
- Combine job functions—offers more flexibility and less idle time

Time Observations

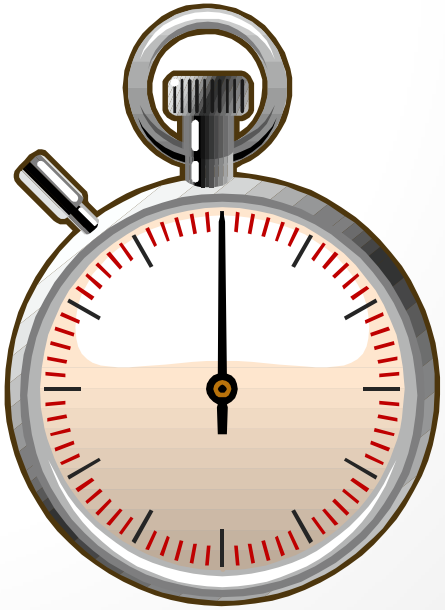
- Cycle Time: 300 seconds
- Drop-off-rate: 1 case per 12 seconds

Automated Cycle Times:

- Filler: 48 seconds per cycle (3 cases) ***CONSTRAINT***
- Capper: 11 seconds per 3 cases
- Labeler: 41 seconds per 3 cases

Manual Cycle Times:

- Loader: 6 seconds per 3 cases
- Packer: 21 seconds per 3 cases
- Stacker: 24 seconds per 3 cases



Determining Takt Time

- Takt Time = Available Time / Customer Demand

- Available Time = 430 minutes:

  [8 hour (480 minutes) – Breaks (20 minutes)

  – Changeover (30 minutes)]

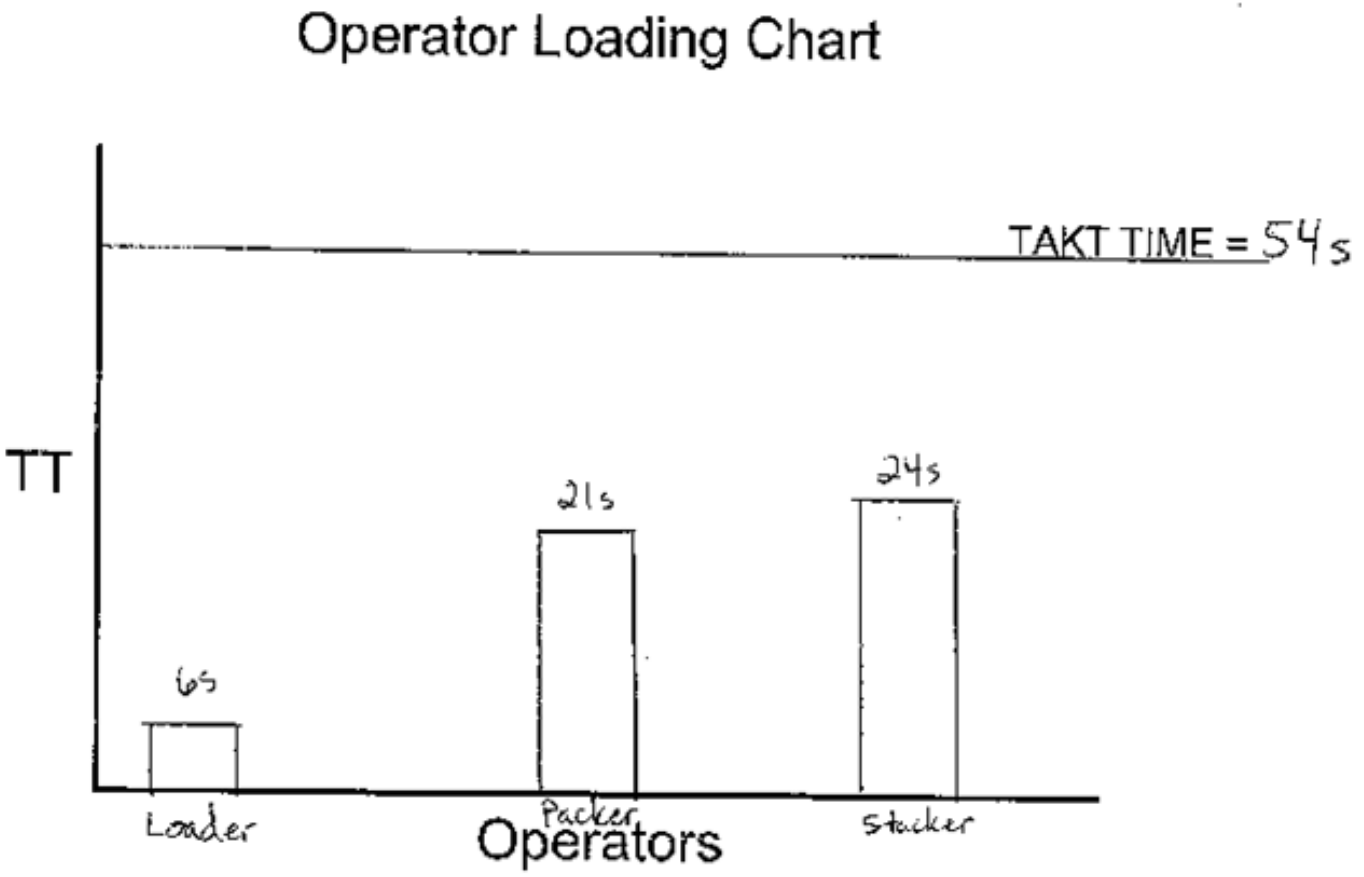
  430 minutes = 25,800 seconds

- Customer Demand = 1,400 cases per 8 hour shift

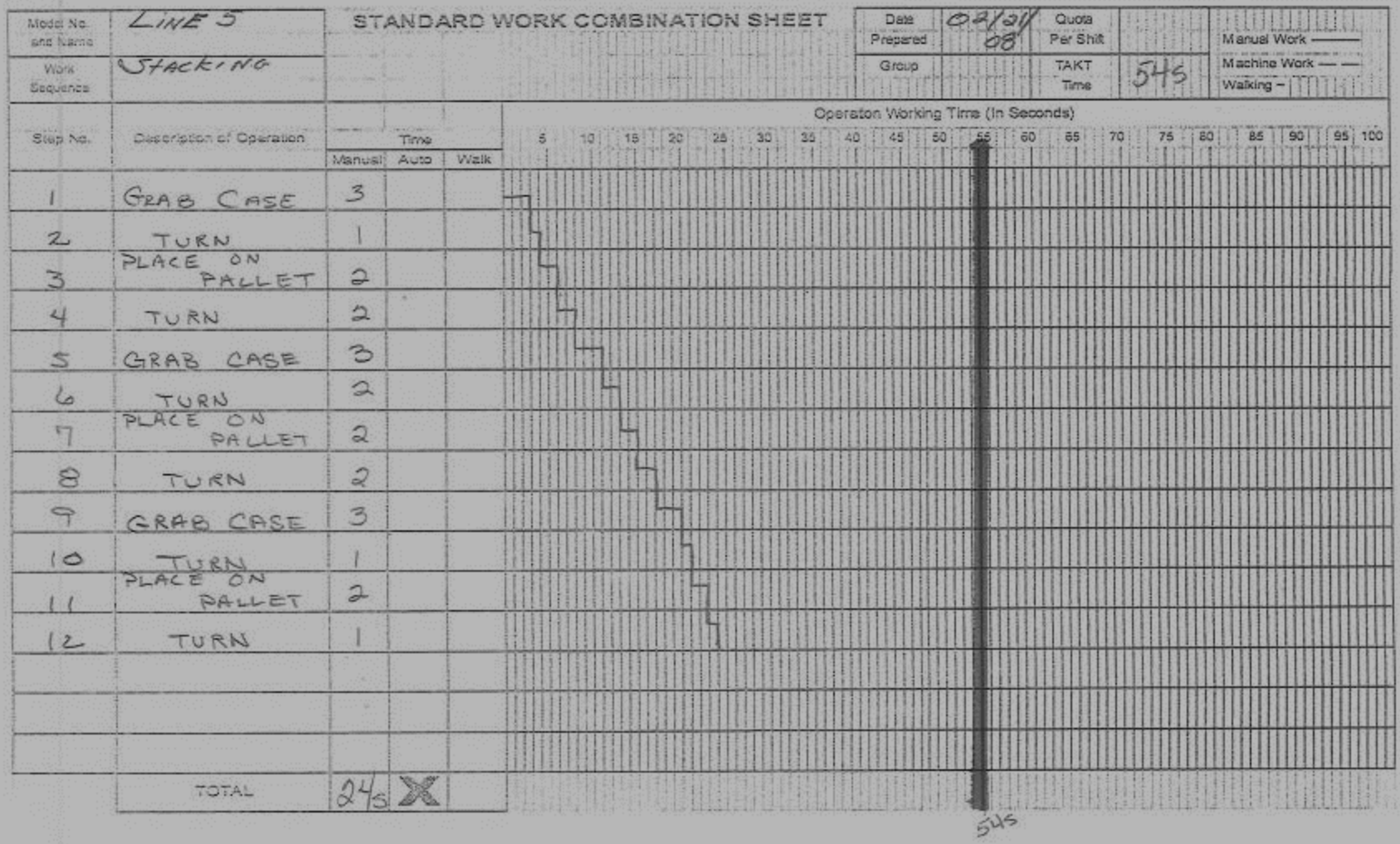
- Takt Time = 25,800 seconds / 1,400 cases = **18 seconds per case**

Takt Time set at 54 seconds per 3 cases to reflect filling of 12 bottles per cycle

Load Chart


Operator Loading Chart
TAKT TIME = 54s
TT
6s
21s
24s
Loader
Packer
Stacker
Operators

Standard Work Combination Sheet

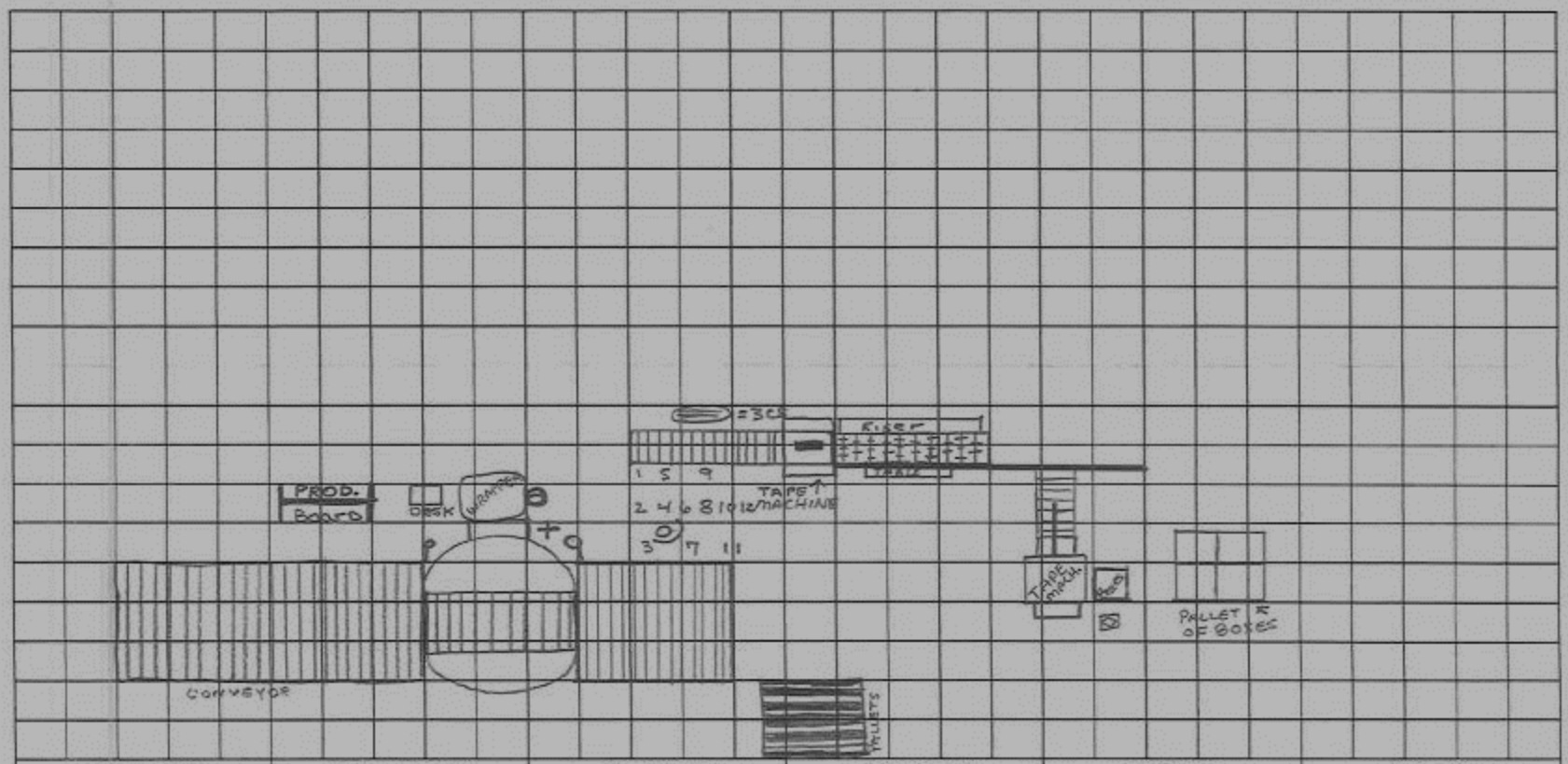


Standard Work

Operation Sequence	From:	TAPE MACHINE
	To:	FG PALLET

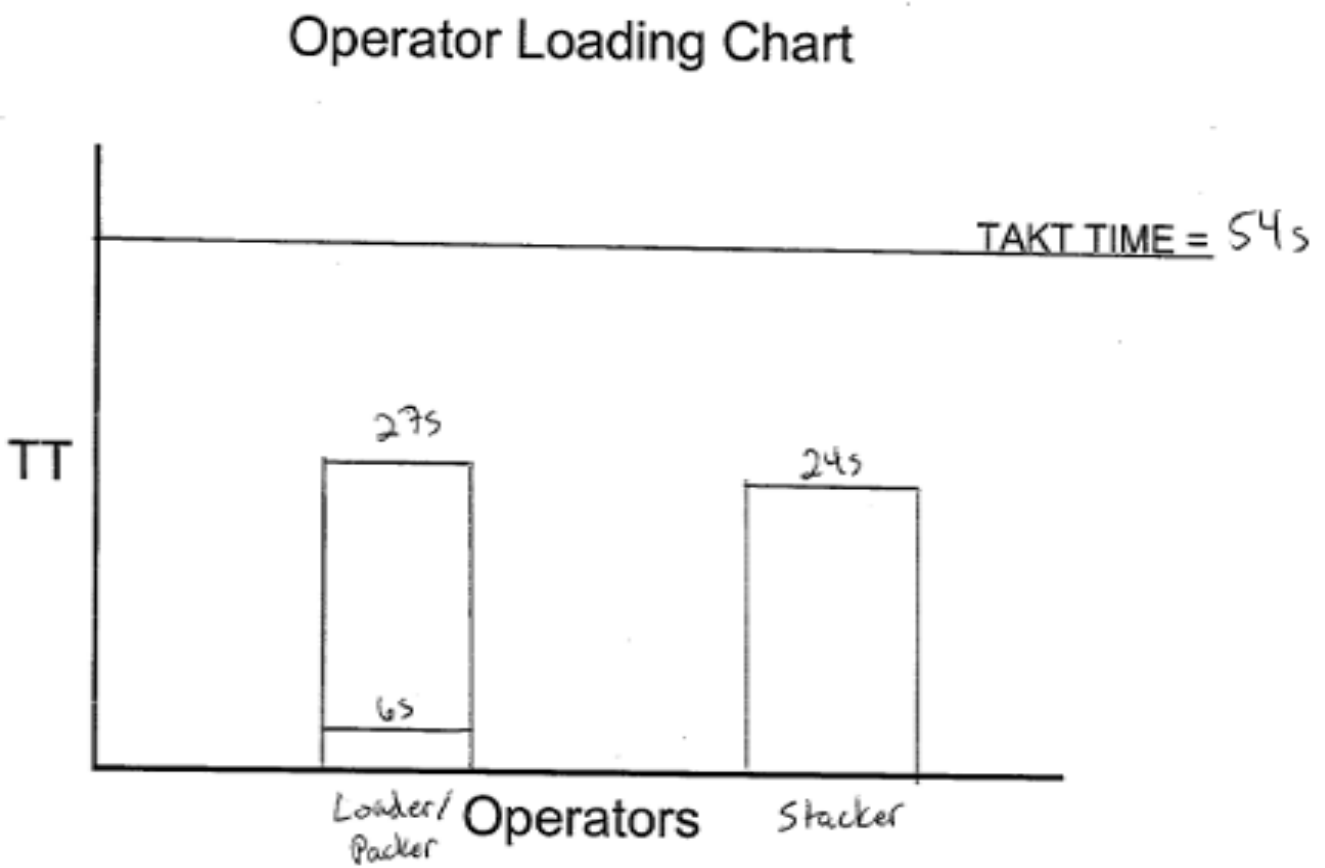
STANDARD WORK SHEET

Part No.	
Part Name:	



Quality Check	Safety Precaution	Standard WIP	# Pieces WIP	TAKT Time	Cycle Time
◇	+	⬭	3 CASES	54s / 3 CASES	24s

Job Function Flexibility

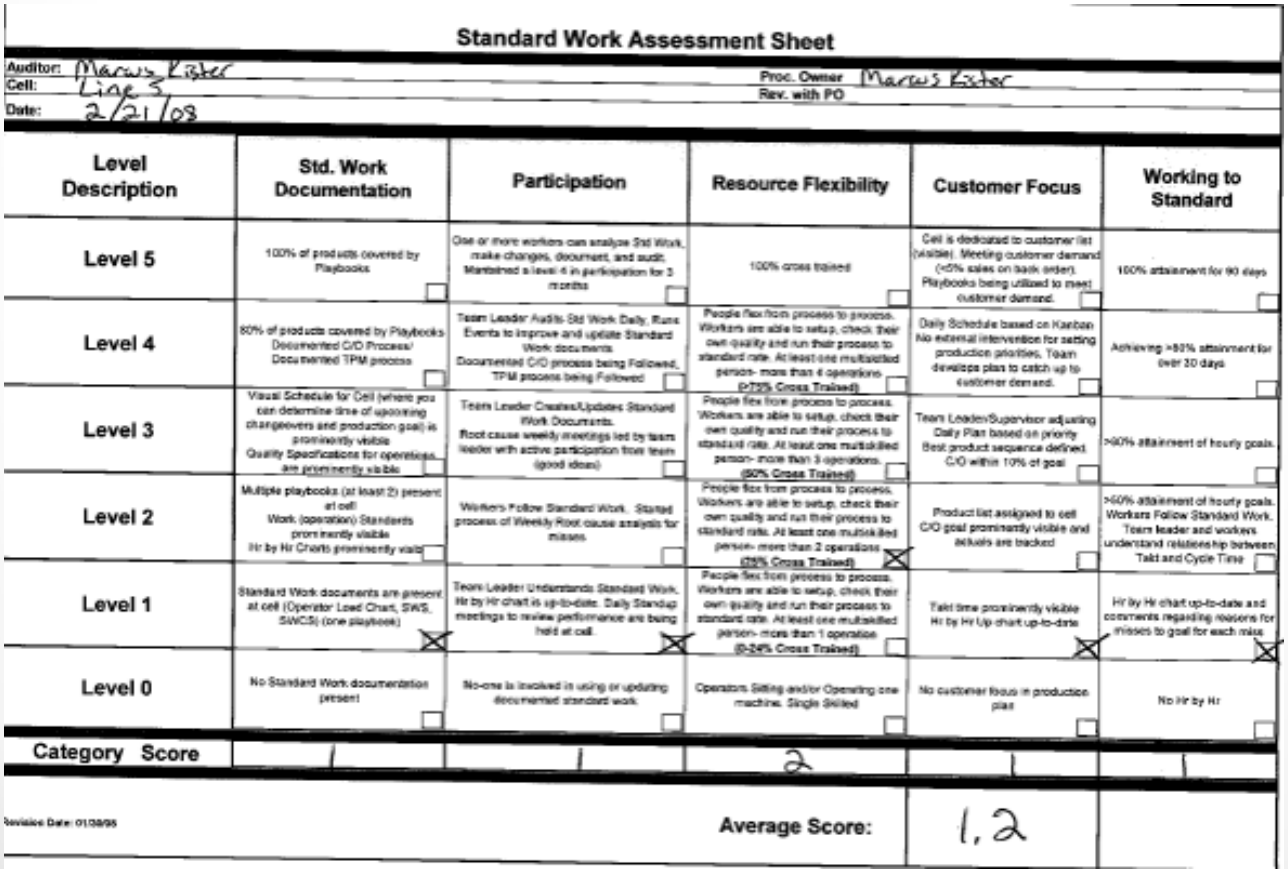


Standard Work Assessment

Before

0.4

After



Standard Work Assessment Sheet

Auditor: Marcus Rister
Cell: Line 3
Date: 2/21/08
Proc. Owner / Rev. with PO: Marcus Rister

Level Description	Std. Work Documentation	Participation	Resource Flexibility	Customer Focus	Working to Standard
Level 5	100% of products covered by Playbooks	One or more workers can analyze Std Work, make changes, document, and audit. Maintained a level 4 in participation for 3 months	100% cross trained	Cell is dedicated to customer list (visible). Meeting customer demand (<5% sales on back order). Playbooks being utilized to meet customer demand.	100% attainment for 90 days
Level 4	80% of products covered by Playbooks. Documented C/O Process/ Documented TPM process	Team Leader Audits Std Work Daily. Runs Events to improve and update Standard Work documents. Documented C/O process being Followed, TPM process being Followed	People flex from process to process. Workers are able to setup, check their own quality and run their process to standard rate. At least one multiskilled person- more than 4 operations (>75% Cross Trained)	Daily Schedule based on Kanban. No external intervention for setting production priorities. Team develops plan to catch up to customer demand.	Achieving >80% attainment for over 30 days
Level 3	Visual Schedule for Cell (where you can determine time of upcoming changeovers and production goal) is prominently visible. Quality Specifications for operations are prominently visible	Team Leader Creates/Updates Standard Work Documents. Root cause weekly meetings led by team leader with active participation from team (good ideas)	People flex from process to process. Workers are able to setup, check their own quality and run their process to standard rate. At least one multiskilled person- more than 3 operations. (50% Cross Trained)	Team Leader/Supervisor adjusting Daily Plan based on priority. Best product sequence defined. C/O within 10% of goal	>80% attainment of hourly goals.
Level 2	Multiple playbooks (at least 2) present at cell. Work (operation) Standards prominently visible. Hr by Hr Charts prominently visible	Workers Follow Standard Work. Started process of Weekly Root cause analysis for misses	People flex from process to process. Workers are able to setup, check their own quality and run their process to standard rate. At least one multiskilled person- more than 2 operations (25% Cross Trained) X	Product list assigned to cell. C/O goal prominently visible and actuals are tracked	>60% attainment of hourly goals. Workers Follow Standard Work. Team leader and workers understand relationship between Takt and Cycle Time
Level 1	Standard Work documents are present at cell (Operator Load Chart, SWS, SWCS) (one playbook) X	Team Leader Understands Standard Work. Hr by Hr chart is up-to-date. Daily Standup meetings to review performance are being held at cell. X	People flex from process to process. Workers are able to setup, check their own quality and run their process to standard rate. At least one multiskilled person- more than 1 operation (0-24% Cross Trained)	Takt time prominently visible. Hr by Hr Up chart up-to-date X	Hr by Hr chart up-to-date and comments regarding reasons for misses to goal for each miss X
Level 0	No Standard Work documentation present	No one is involved in using or updating documented standard work.	Operators Sitting and/or Operating one machine. Single Skilled	No customer focus in production plan	No Hr by Hr
Category Score	1	1	2	1	1
			Average Score:	1,2	

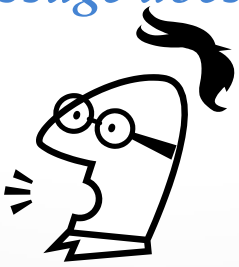
Revision Date: 01/30/05

1.2

5-S Improvements

Before

What message does this send?!



5-S Improvements

After

(New plywood siding installed)

What an Improvement!!!

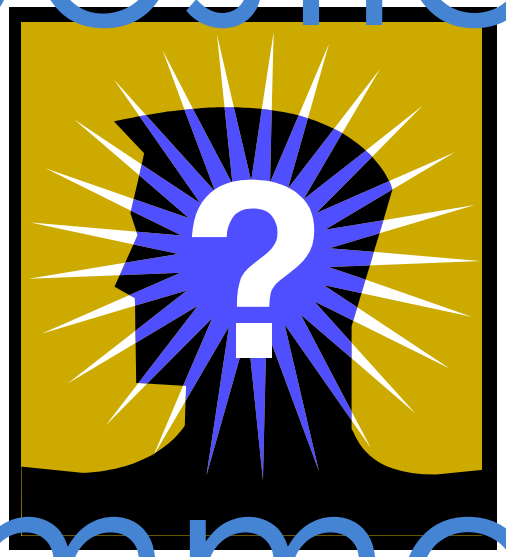
Many thanks to our maintenance team for their tremendous efforts and contributions!!

What's Next???

Newspaper Items:

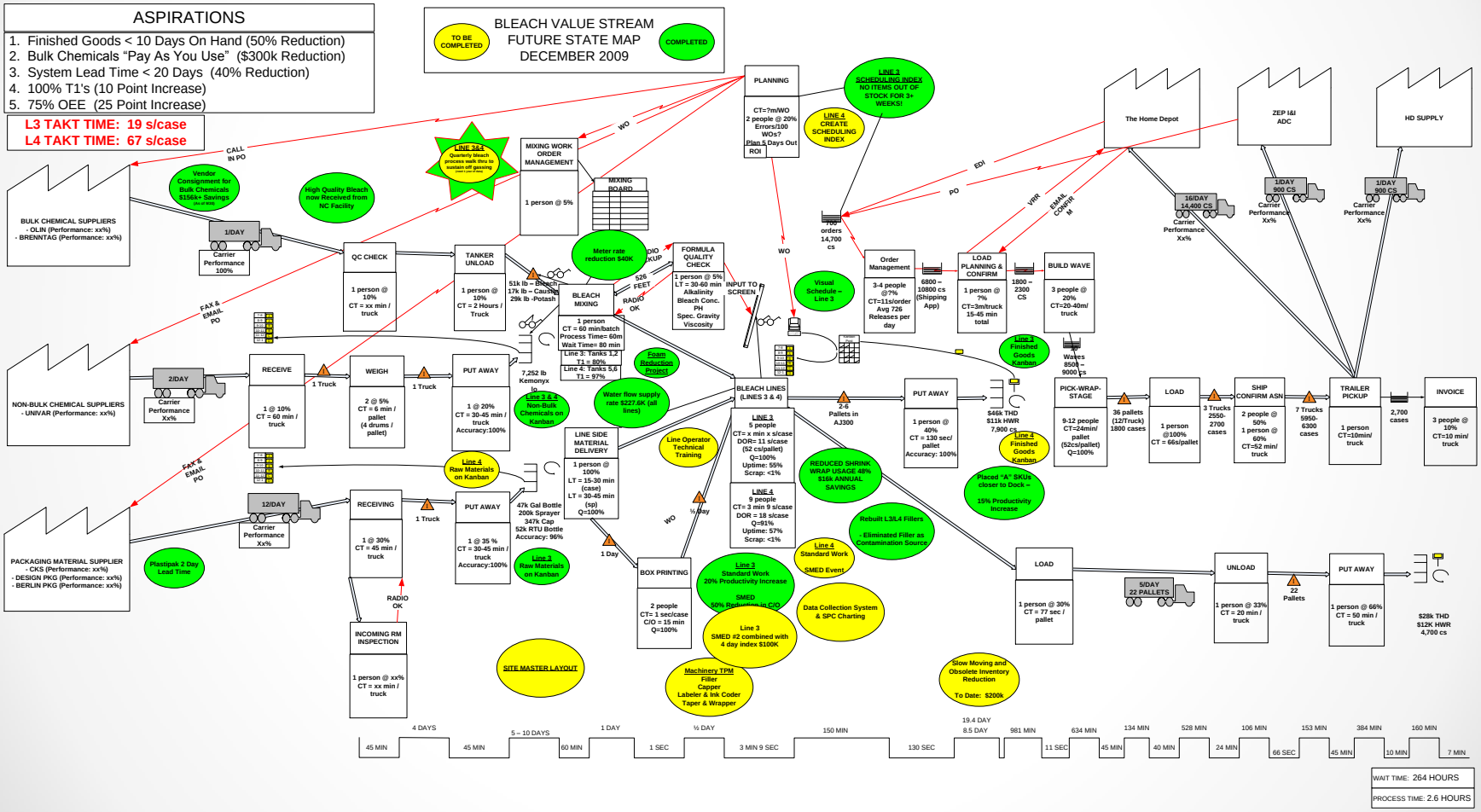
- Training the stakeholders
- Creation of audits
- Skills matrix—100% cross-functional by 3/21/08
- Additional playbooks created for 3-person and 5-person teams

Questions



Comments

Value Stream Map



The Executive Board is Visiting

EPD has Recognized the Site
The Ombudsman has recognized the Site
Emerson Does it Again!

POWDERS LINE 1

FY2010

P1 - Before

P1 - Before

- Has 4 positions: Bottle loader, Filler/Capper, Packer, Stacker
- Distance from bottle loader to stacker is 40 ft.
- Bottle loader = ½ time position
- Filler/capper = Full time position
- Packer = Full time position
- Stacker = ½ time position
- Cannot combine the two ½ time positions due to the distance between them
- Current DLE% is 112% with a head count of 4

P1 – Now

- Extend bottle turn table, next to stacking area by adding: 90 conveyor, 15 ft conveyor, & 2 110w electrical drops.
- Reduces distance by approx. 12 ft
- Combines the 2 - ½ time positions
- Reduces head count by 1, possibly 2
- Converts line into a U-shape cell
- DLE% increase up to 60% - from 112% to 172% **(-2 heads)**

Needed to Complete

- Equipment: Conveyors – 90 degree turn, 15 ft straight
- Electrical additions: - Extend 110w from over line to power turn table & conveyor (2 drops)
- Work can be performed by maintenance (no outside contactors required)
- Amount of money = Approx. $25,000 per Chuck Berry
- Labor savings = Reduce head count by 1 = $720 a week (40 hours)
  Reduce head count by 2 = $1,440 a week (40 hours)
- *If line ran 40 hours a week & able to reduce head count by 2; would pay for itself in labor savings in approx. 18 weeks*

New conveyor added

Zep maintenance installing

Results

- 1st week of production after installation
  - DLE% = 155% (+ 40%)
  - Headcount = Lowered by 1 on ZROOT2, ERK24, & 8646
  - Headcount = Lowered by 2 on RR16

More Successes

- The Big Daddy Buy
- Manufacturer of the Year!
- Consumer Product Safety Commission
- Thrived During the Economic Downturn!

Event

Powders

P3

Standard Work & 5s

April 23 - 24

Team

Sue Knox, Angel Farist, & Anabel Rodriguez

Powders - P3 Standard Work & 5s

4/23/12 – 4/24/12	Powders

Emerson

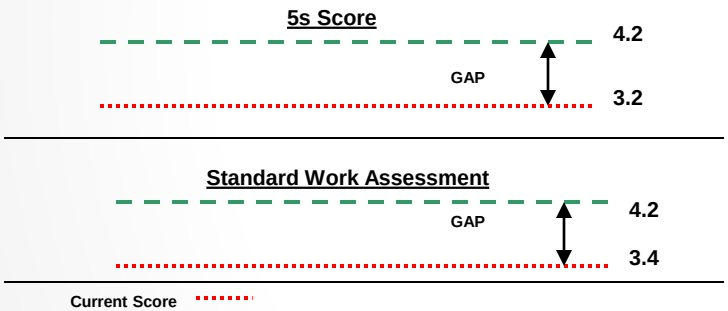
P3's 5s score hasn't improved in over 6 months. The visual documents are outdated, line organization has decreased, and responsibilities need to be updated.

P3's standard work hasn't been updated since the addition of the new filling machine & added conveyors. All visual documents pertaining to standard work needs to be updated.

5s & Standard Work

All other Powder Production Lines

5s Audit – Increase 5s score from 3.2 to 4.2	**3.2**	**4.2**	**31 %**	??%	??%	??%
Standard Work Assessment - Increase score from 3.4 to 4.2	**3.4**	**4.2**	**24 %**	??%	??%	??%



1. Documented Method for Uneeded Items
2. Line Parts Labeled
3. Computerized Line Layout of 5s Zones by Color
4. Staffing Daily 5s Responsibilities by Color
5. Updated Tooling Shadow Board
6. Updated 5s Audit Form
7. 5s Color Scheme Line
8. Playbook with 100% of Products Covered
9. Documented C/O Process
10. Updated Operator Load Chart & Standard Work Sheet

	Target End Date	Responsible	Complete Status 25/50/75/100%
1.			☐☐☐☐
2.			☐☐☐☐
3.			☐☐☐☐
4.			☐☐☐☐
5.			☐☐☐☐
6.			☐☐☐☐
7.			☐☐☐☐
8.			☐☐☐☐
9.			☐☐☐☐
10.			☐☐☐☐

TEAM MEMBERS

1. Angel Farist
2. Sue Knox
3. Anabel Rodriguez

Scores = Old / New

Standard Work Assessment

3.4 / 4.2

- Std. Work Documentation = 3 / 5
- Participation = 3 / 4
- Resource Flexibility = 4 / 4
- Customer Focus = 3 / 4
- Working To Standard = 4 / 4

5s Score

3.2 / 4.2

- Simplify = 3 / 5
- Straighten = 3 / 4
- Scrub = 4 / 5
- Stabilize = 3 / 4
- Sustain = 3 / 3

Standard Work

5s

5s Responsibilities

P3 - 5s

Sealer – Daily

- Clean & straighten raw material pallets
- Clean & sweep the floor around machine, conveyor, turntable, & desk
- Dispose of PPE

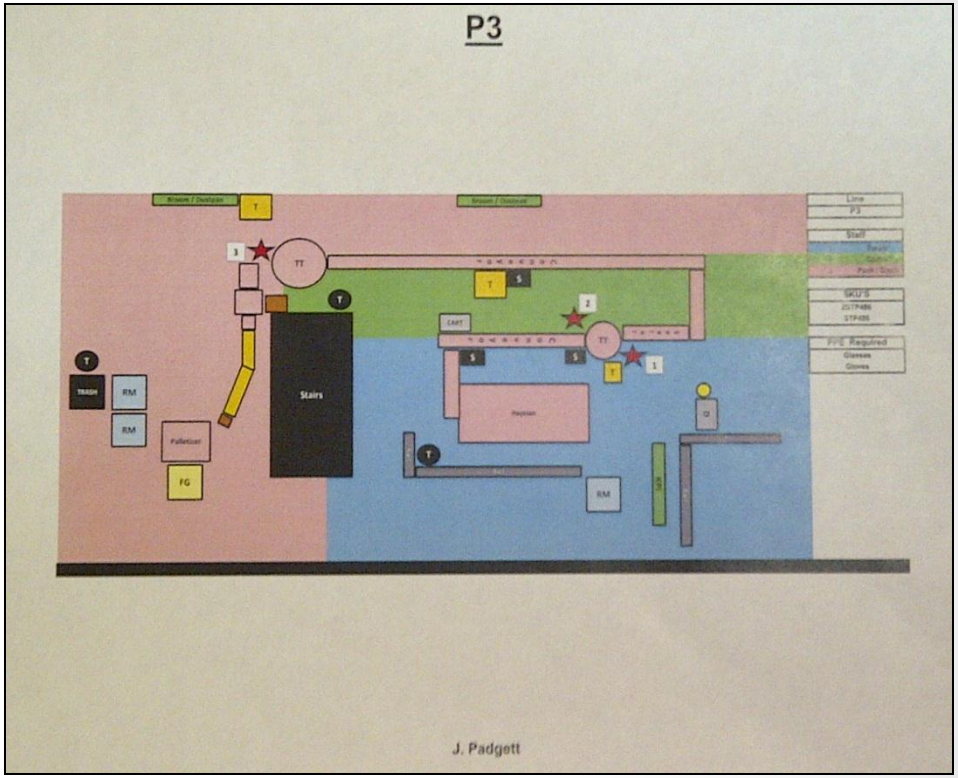
Stuffer – Daily

- Count & record scrap
- Clean & sweep the floor around the turn table, sealer, conveyor, & tooling table
- Make sure all containers are emptied
- Vacuum
- Make sure drums are labeled & covered

Packer / Stacker – Daily

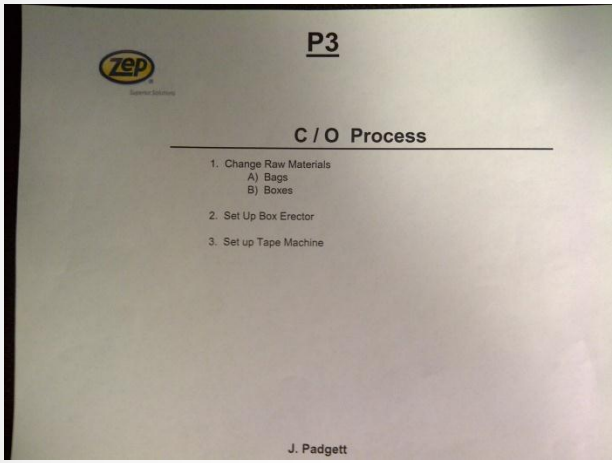
- Count & record scrap
- Clean the sweep the floor around turn table, taper, rollers, & palletizer
- Sweep floor under hopper against back wall
- Clean & straighten raw material pallets
- Dispose of cardboard

5s Zones

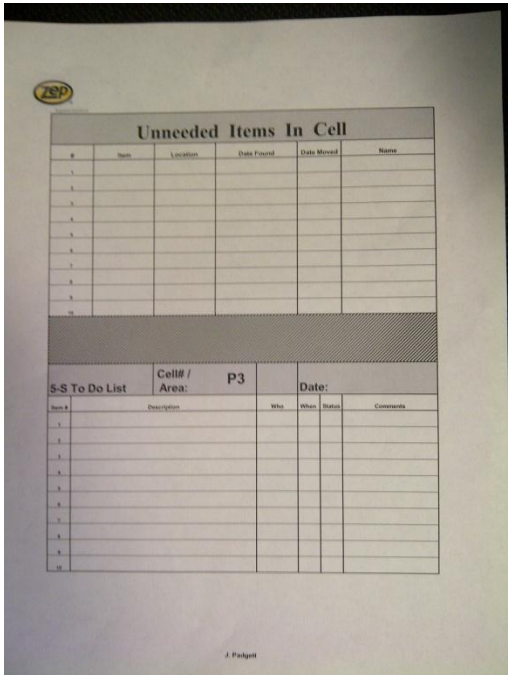


Other Deliverables

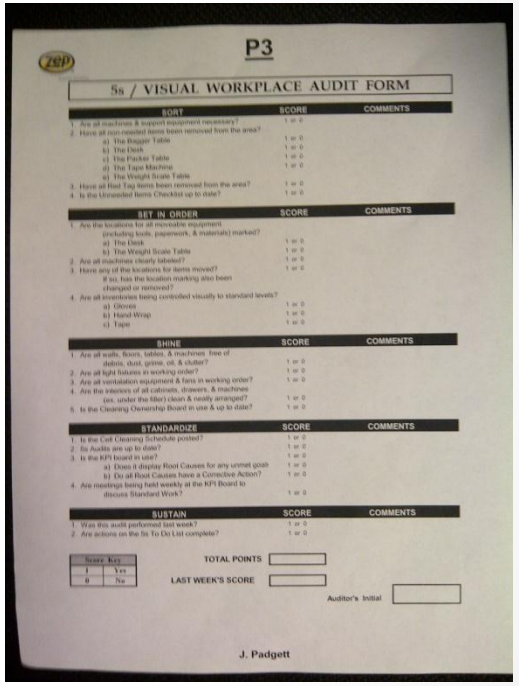
C/O Process



Unneeded Items Checklist



5s Audit Form



Production Rates

- Standard – 240 cs (2 batches) @ 430 mins with 3 people = 33 cs/hr
- Actual – 1) 240 cs (2 batches) @ 330 mins with 3 people = 44 cs/hr (25%)
  2) 360 cs (3 batches) @ 430 mins with 3 people = 50 cs/hr (12%) Total = (37%)
- Future – 480 cs (4 batches) @ 430 mins with 3 people = 66 cs/hr (50%)

  - ✓ Redesign Line (move sealer)
  - ✓ Shorten Travel Time By Removing Conveyor

Needed to Complete

- Equipment: Conveyors – 90 degree turn, 15 ft straight
- Electrical additions: - Extend 110w from over line to power turn table & conveyor (2 drops)
- Work can be performed by maintenance (no outside contactors required)
- Amount of money = Approx. $25,000 per Chuck Berry
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- *If line ran 40 hours a week & able to reduce head count by 2; would pay for itself in labor savings in approx. 18 weeks*

VIDEO

Daily Accountability

- Tiered meetings
  - <15 min
  - Standing up
  - Adjacent to process
  - Agenda Dictated by Visual Controls
- Assessment/ Assignment / Accountability
- Root Cause Analysis

How to Engage?

- Who is my customer?
- What do they value?
- What processes do I use to deliver that value?
- What should I measure?
- How am I performing?
- What is my rate of improvement?

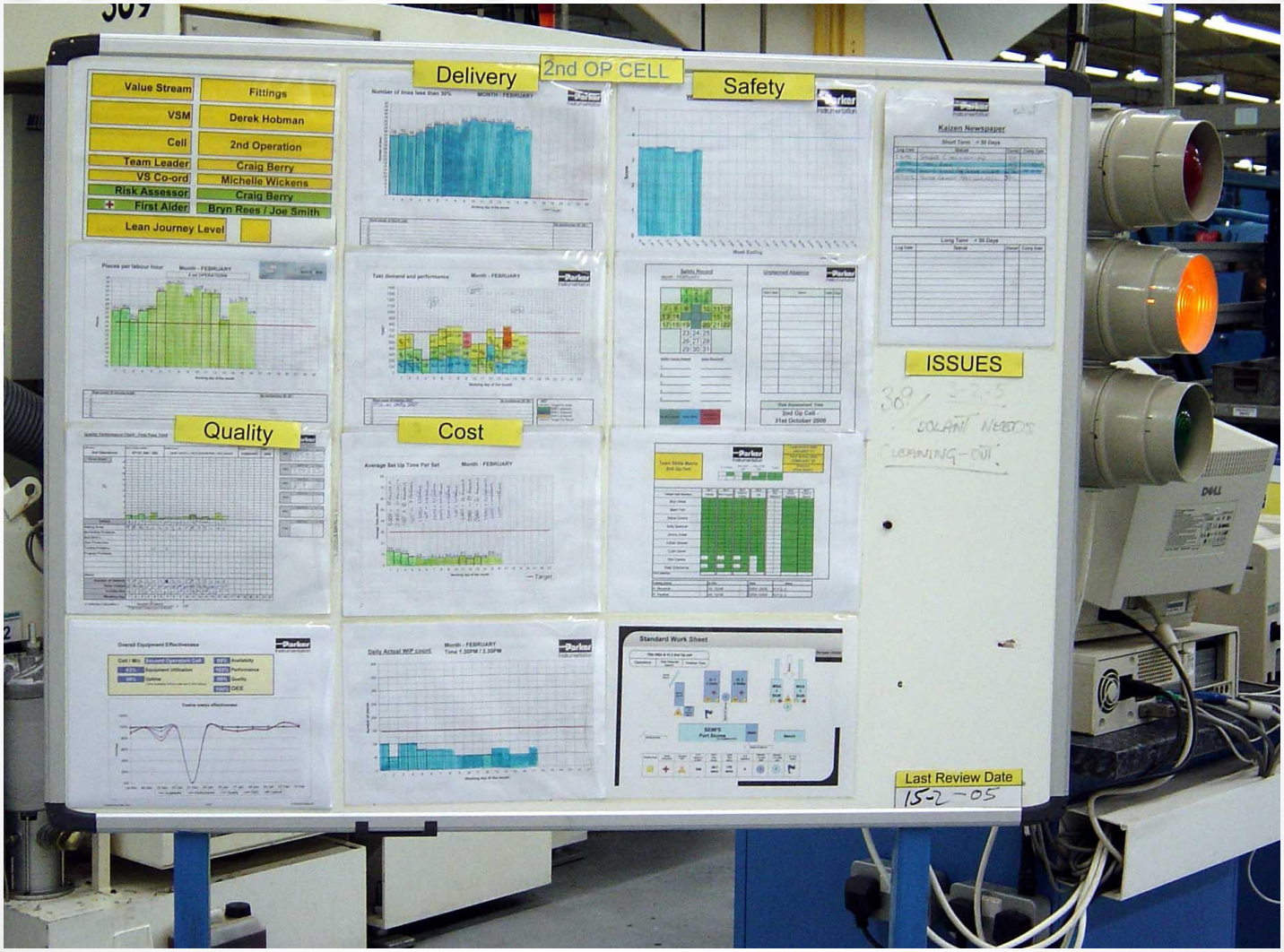
VMS Key Process Indicators

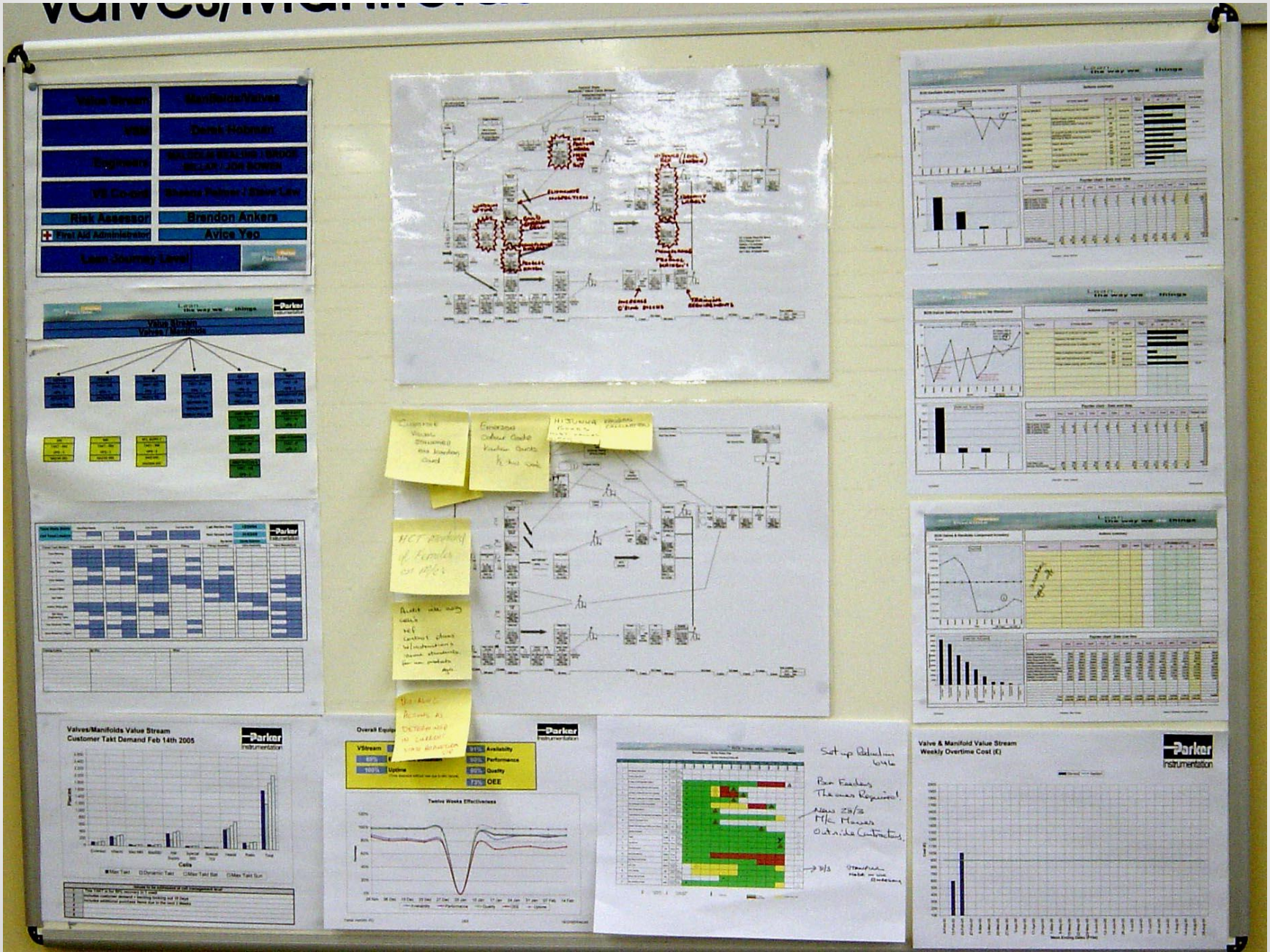
- Enterprise Risk
  - Environmental Health and Safety/Compliance (EHS/C)
  - Sox Compliance
  - Legal Compliance
- Quality
  - Defect & Error free
- Delivery
  - On-time & Complete
- Cost
  - Productivity & Profitability
- 5S and or Innovation

Stand up Meeting

Cell Performance Board

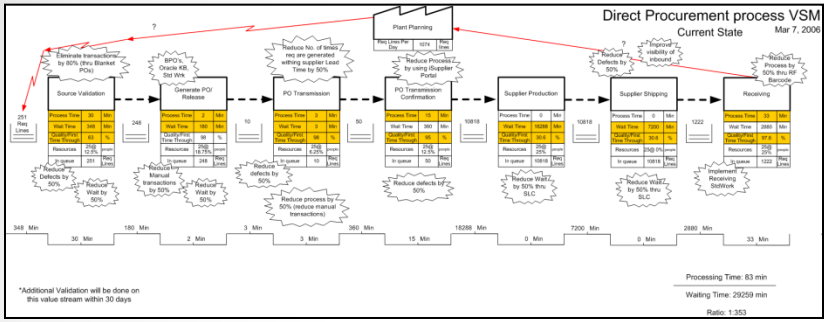
Cell Performance Board



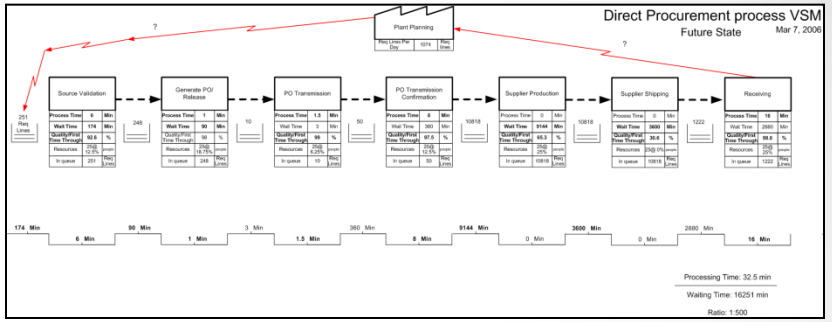

Value Stream
Manifolds/Valves
VSM
Derek Hobrein
Engineers
VS Co-ord
Sheena Palmer / Steve Law
Risk Assessor
Brendon Ankers
First Aid Administrator
Avice Yeo
Lean Journey Level
Value Stream
Valves / Manifolds
Valves/Manifolds Value Stream
Customer Takt Demand Feb 14th 2005
Overall Equip
VStream
Availability
Performance
Quality
OEE
Uptime
Twelve Weeks Effectiveness
Valve & Manifold Value Stream
Weekly Overtime Cost (£)
Parker
Instrumentation

Continuous Improvement Board

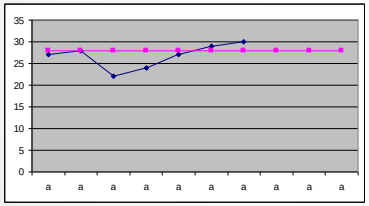
Current State

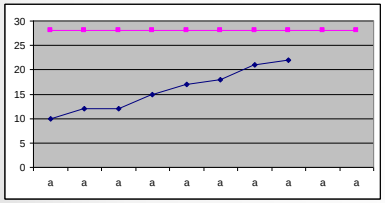


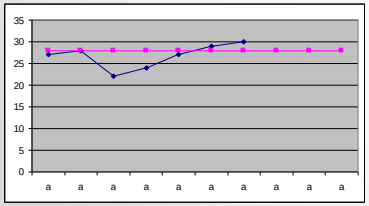
Future State

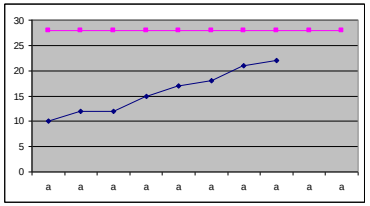


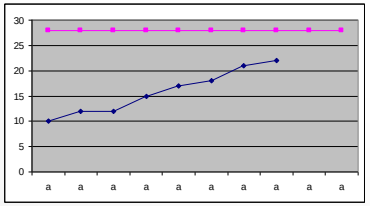
VS Metrics



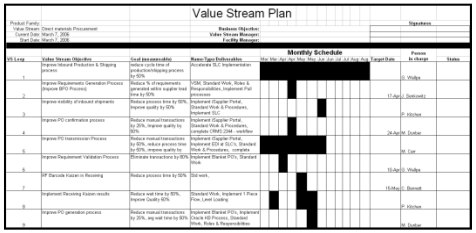








Transformation Plan



Event R.C./ Newspapers

AcuityBrands.

Key Performance Indicators

Operational Definitions

E = # Contracts by Commodity
Q = Quality (% Requisitions on BPO)
D = Delivery (Late TVC by day)
C = Total Delivered COST

Met Goal
Goal Not Met

Product / Service	Customer
Strategic Sourcing of Electrical Commodities, 34% OF Total SPEND (VALIDATED / VALIDATED / VALIDATED)	E - ABL LEGAL (BARRY GOLDMAN) Q - PLANTS (GUILLERMO JAZQUEZ) D - PLANTS / PMO / CUSTOMERS (JACK BROWN) C - PMO / FINANCE (LAVON D.) SLC - MARTY CARR AP - PATHEYMAN - Diana Prentiss (5/16)

Comments

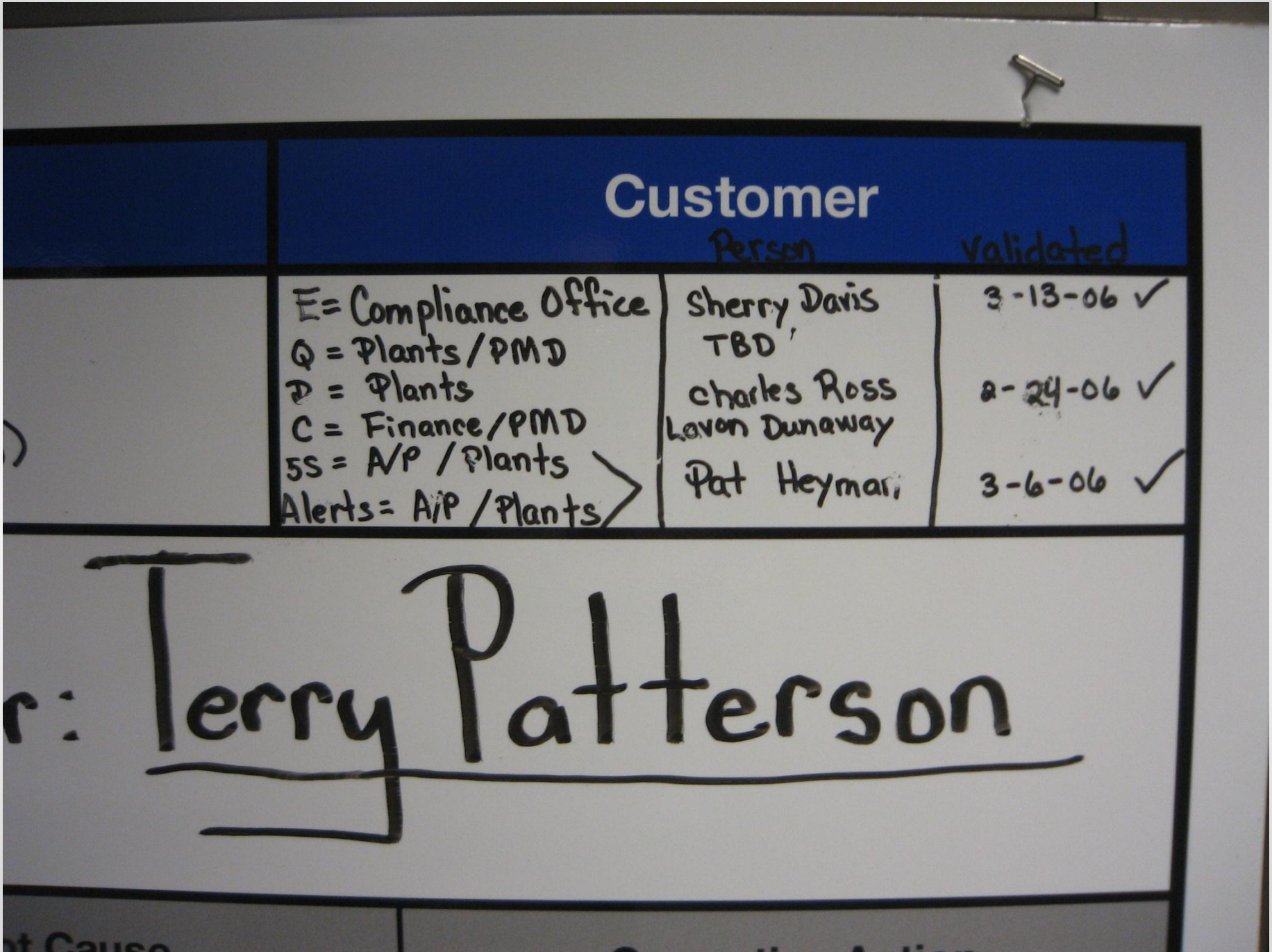
Team: Tommy Clyde Jeff Delare Cheryl Deborah **Process:** COMMODITY MGT. FOR ELECTRICAL SPEND

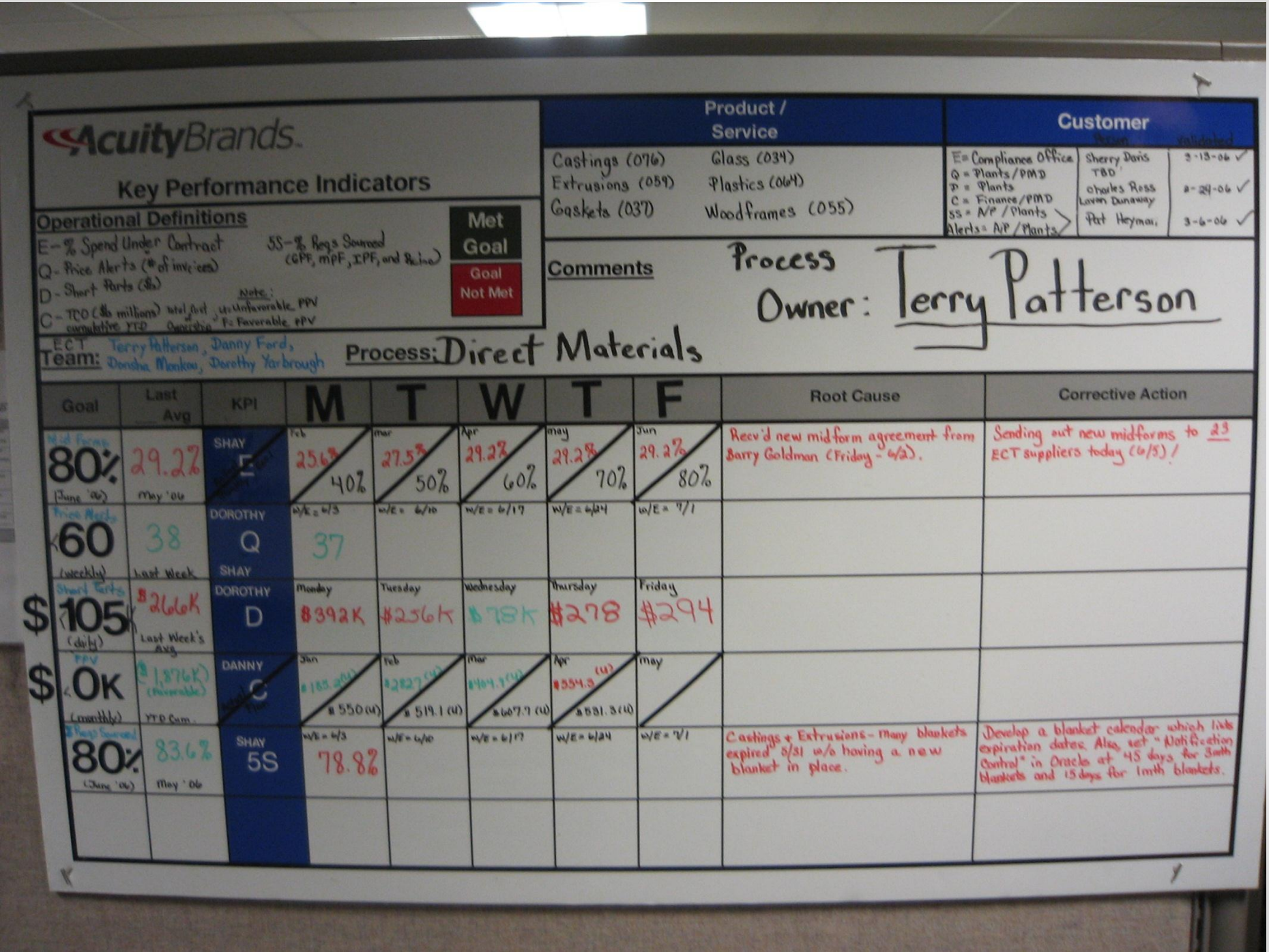
	Goal	Last Avg	KPI	JAN	FEB	MARCH	APRIL	MAY	Root Cause	Corrective Action
C.H.	PLAN / ACTUAL	79%	E	40% / 79%	50% / 79%	60% / 80%	70% / 84%	80% / 86%	10 midfirms signed	
D.F.	78%	91.4%	Q	5-1 / 91.5	5-8 / 89.0	5-15 / 92.8	5-22 / 91.5	6-5 / 92.9	GREAT JOB!! (End of Month Blanket)	
D.H.	170K	Previous WK 561K	D	6/6 / 443K	6/7 / 729K	6/8 / 883	6/9 / 519K	6/5 / 824K	Flexible-73K OSRam-50K UNIV-22K ICT-51K Advance-250K GE-23K	Advance increasing TS production capacity Expanding supplier SLC presence Moving volume away from Advance Beijing Dynamics to GSLC Subbing "field" inverters for short "factories"
C.H.	PLAN / ACTUAL	1,474	C	(731) / (1,104)	(600) / (474)	(866) / (1429)	(700) / (1781)	(800)	GREAT JOB!	Learn to join us 6/13 0k
CL	PLAN / ACTUAL	1	SLC IMPLEMENTATION	5/22 / 3 / 0	5/29 / 3 / 1	6/5 / 3 / 2	5/8 / 3 / 3	5/15 / 3 / 0	OSRAM ✓ PHILIPS GE - close AIW FLEX WHIPS ✓ HEILAND - close KAUFMAN VENTURE - 1pl.	- Sending DAILY e-mails asking for updates - Having joint concalls w/ EGL Supplier, Sourcing + SLC Team
C.H.	20	27.5	A/P PRICE HOLDS	6/5 / 20 / 53	5-8 / 20 / 14	5-15 / 20 / 18	5-22 / 20 / 26	5-29 / 20 / 40	AIW-16 Raytec-23 Flexwhip-2 Philips-1 NIDEJ4-9 NGES-2	Blanket PO's now List Correct Pricings - Currently Working W/AP to Clear INV. Price Alerts

Customer

E - ARL LEGAL (BARRY GOLDMAN)
Q - PLANTS (GUILLERMO JAZQUEZ)
D - PLANTS / PMO / CUSTOMERS (JACK BECKER)
C - PMO / FINANCE (LAVON D.)
SLC - MARTY CARP

AP - PAT HEYMAN - Diana Prentiss (5/16)


Customer
Person
Validated
E= Compliance Office
Q = Plants/PMD
P = Plants
C = Finance/PMD
5S = A/P / Plants
Alerts = A/P / Plants
Sherry Davis
TBD
Charles Ross
Lavon Dunaway
Pat Heyman
3-13-06
2-24-06
3-6-06
r: Terry Patterson

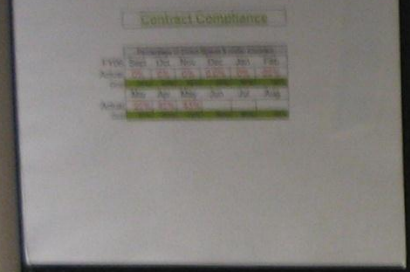

AcuityBrands.
Key Performance Indicators
Operational Definitions
E - % Spend Under Contract
Q - Price Alerts (# of invoices)
D - Short Parts ($s)
C - TCO ($s millions) total cost of ownership cumulative YTD
5S - % Reqs Sourced (GPF, mPF, IPF, and Reline)
Note: U=Unfavorable PPV F=Favorable PPV
Met Goal
Goal Not Met
Product / Service
Castings (076)
Extrusions (059)
Gaskets (037)
Glass (034)
Plastics (064)
Woodframes (055)
Customer
E = Compliance Office
Q = Plants/PMD
P = Plants
C = Finance/PMD
5S = A/P / Plants
Alerts = A/P / Plants
Sherry Davis
TBD
Charles Ross
Loren Dunaway
Pat Heyman
Validated
2-13-06
2-24-06
3-6-06
Comments
Process Owner: Terry Patterson
ECT Team: Terry Patterson, Danny Ford, Donsha Monkou, Dorothy Yarbrough
Process: Direct Materials
Goal
Last Avg
KPI
M
T
W
T
F
Root Cause
Corrective Action
Mid Forms
80%
(June '06)
29.2%
May '06
SHAY
E
Feb 25% 40%
Mar 27.5% 50%
Apr 29.2% 60%
May 29.2% 70%
Jun 29.2% 80%
Recv'd new mid form agreement from Barry Goldman (Friday - 6/2).
Sending out new midforms to 23 ECT suppliers today (6/5)!
Price Alerts
60
(weekly)
38
Last Week
DOROTHY
Q
SHAY
w/E = 6/3
37
w/E = 6/10
w/E = 6/17
w/E = 6/24
w/E = 7/1
Short Parts
$105K
(daily)
$266K
Last Week's Avg
DOROTHY
D
Monday $392K
Tuesday $256K
Wednesday $78K
Thursday $278
Friday $294
PPV
$0K
(monthly)
($1,876K) (Favorable)
YTD Cum.
DANNY
C
Jan $185.2M (U) $550 (U)
Feb $282.7M (U) $519.1 (U)
Mar $404.7M (U) $607.7 (U)
Apr $554.3 (U) $531.3 (U)
May
$ Reqs Sourced
80%
(June '06)
83.6%
May '06
SHAY
5S
w/E = 6/3
78.8%
w/E = 6/10
w/E = 6/17
w/E = 6/24
w/E = 7/1
Castings + Extrusions - many blankets expired 5/31 w/o having a new blanket in place.
Develop a blanket calendar which lists expiration dates. Also, set "Notification Control" in Oracle at 45 days for 3mth blankets and 15 days for 1mth blankets.

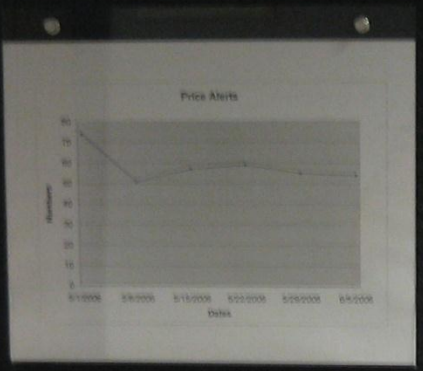
E

Q

D

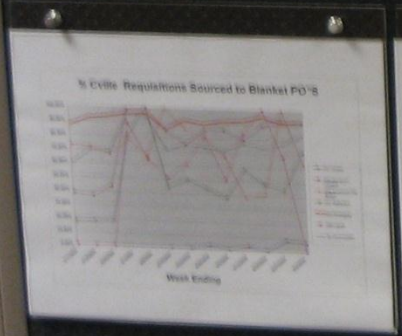
C

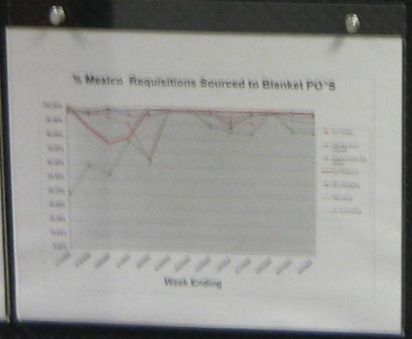

Contract Compliance

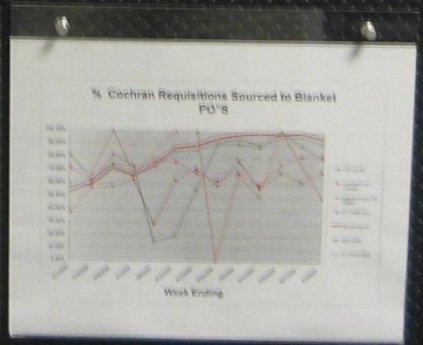

Price Alerts
Dates

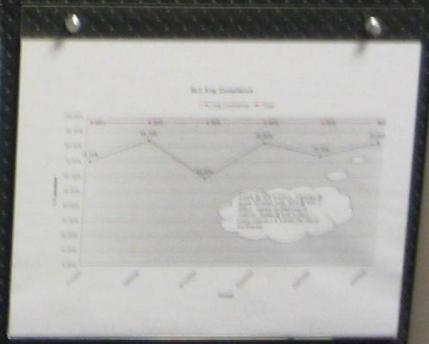

Short Part Analysis
Dollars
Dates

* * 5S * * SLC


% Cville Requisitions Sourced to Blanket PO'S
Week Ending


% Mexico Requisitions Sourced to Blanket PO'S
Week Ending


% Cochran Requisitions Sourced to Blanket PO'S
Week Ending



AcuityBrands.

Key Performance Indicators

Operational Definitions 5S Sourced Req.

E Spend Under Contract
Q Price Alerts (invoices)
D Short Parts
C TCO = Total Cost Ownership

SLC Compliance o/o of items @ or above level

Met Goal

Goal Not Met

Product / Service	Customer
Aluminum, Packaging Reflectors, Labels, Buffing, Louvers	Plants = Jim Rush, Lazaro Barbosa, Luc Gurus May Finance = Laren Dunaway = May Compliance = Larry Miller = May 31

Comments

Process Owner: Chris Castleberry

Team: FLAT ROLL Process: Direct Material

Goal	Last Wk Avg	KPI	M April	T May	W June	T July	F Aug	Root Cause	Corrective Action
80%	42%	MID FORMS E	42%	43%	43%			Legal had mid-form from Feb - May	New Mid-form received 6/2 from legal. Have 6 mid-forms targeted this month totaling $20mm to REACH GOAL.
96	54	PRICE Q ALERTS	6/5 96 / 53	6/12 96	6/19 96	6/26 96	7/3 96		
$87.5	140	SHORT D PARTS	M / 129	T / 173	W / 128	T / 165	F / 108	ALP = 43,644 Pratt = 40,882 Ecolite = 21,384	Substantial increase, demand beyond forecast. Working to implement new levels in SLC.
0	634 / 1226	ACT C PLAN	April 634 / 1226	May	June	July	Aug		May data due week of 6/12
80	89.9	5S BLANKETS	6/5 90.2	6/12	6/19	6/26	7/3		
96%	74%	SLC COMPLIANCE	6/5 82.8	6/12	6/19	6/26	7/3	Significate increase levels New GSLC + ISLC metrics Implementation. ALC - 0 Ecolite - 16	ISLC + GSLC Newly Created Continue Implementation!!

ZBS Countermeasure Tips

When to Use:
•When actual performance does not meet planned performance
•When your process is failing (bowling chart – AIP, KPI, Hour by Hour Board, etc.)

Run Chart/Trend Chart:
•What KPI or TTI are you trying to improve?
•Show historical trend; include both Plan and Last Year along with actuals

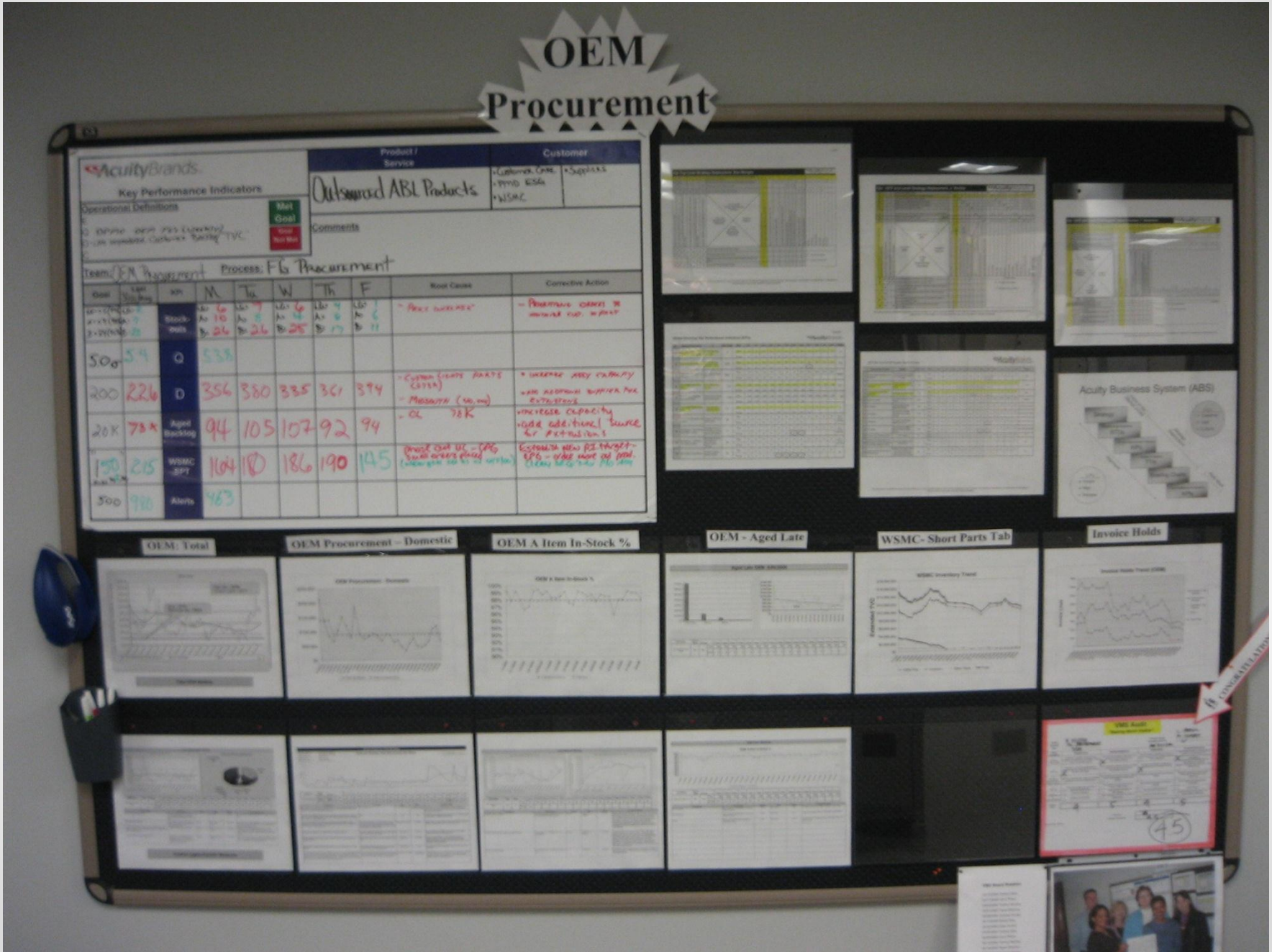
Pareto Chart:
•Shows the "top" reasons why we missed plan
•80/20 rule – 80% of your issues are caused by 20% of your underlying factors
•Work on the vital few that cause the most problems and will give us the greatest impact
•Helps you prioritize your problems, ensures you don't start with the small stuff

Description of the Problem:
•What is happening?
•Be specific – use data! Not feelings
•Make sure it ties back to your Pareto chart
•You may have more than one root cause for one problem, that is OK!

Root Cause:
•Why is this problem happening?
•Use 5 Why's to help determine root of the problem

Countermeasure:
•An action taken to offset another action
•Develop an action plan to quickly get back on target
•Focus on fixing the process
•Keep the countermeasure on the schedule until the problem is fixed
•You know your countermeasure has worked if the problem does not reoccur

Assigned To:
•Who owns the action?
•Can be a team but try to have a specific name so that leadership knows who is responsible, also ensures action will take


OEM
Procurement
AcuityBrands.
Key Performance Indicators
Product / Service
Outsourced ABL Products
Customer
Comments
Team: OEM Procurement
Process: FG Procurement
Root Cause
Corrective Action
OEM: Total
OEM Procurement – Domestic
OEM A Item In-Stock %
OEM - Aged Late
WSMC- Short Parts Tab
Invoice Holds
Acuity Business System (ABS)
CONGRATULATIONS

VMS Audit

"Making Work Visible"

R. VILLEDA
FA: PROCUREMENT
3/24

L. PREISS

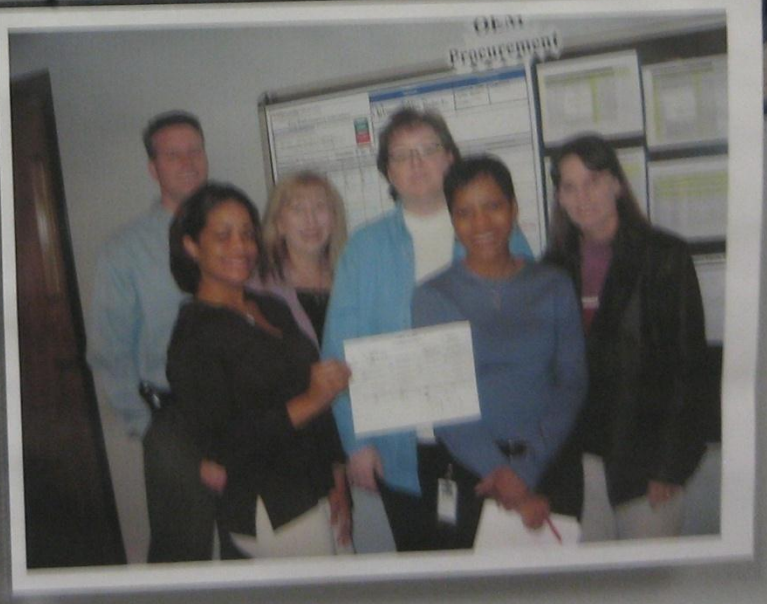
5 Excelling		X		X
4 Achieving	X		X	
3 Performing (Standard Work)				
2 Learning				
1 Beginning				
VMS Not Started				
Category Score	4	5	4	5

18
4.5

4.5

VMS Board Rotation

~~04/10/2006~~ Teresa Clark
~~04/17/2006~~ Larry Preiss
~~04/24/2006~~ Tammy Murphy
~~05/01/2006~~ Paula Shipman
~~05/08/2006~~ Tammie Dooley
~~05/15/2006~~ Deedy Pate
~~05/22/2006~~ Ester Arnold
~~05/28/2006~~ Teresa Clark
~~06/05/2006~~ Larry Preiss
~~06/12/2006~~ Tammy Murphy
~~06/19/2006~~ Paula Shipman
~~06/26/2006~~ Tammie Dooley
~~07/03/2006~~ Deedy Pate
~~07/10/2006~~ Ester Arnold
~~07/17/2006~~ Teresa Clark
~~07/24/2006~~ Larry Preiss
~~07/31/2006~~ Tammy Murphy

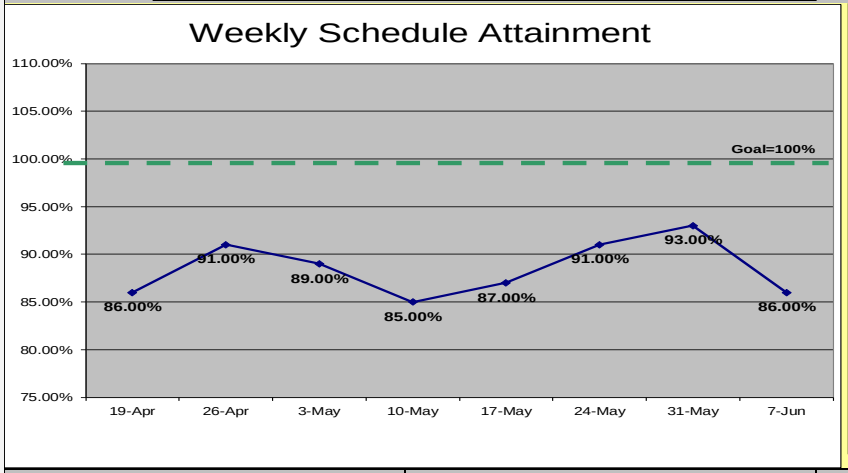


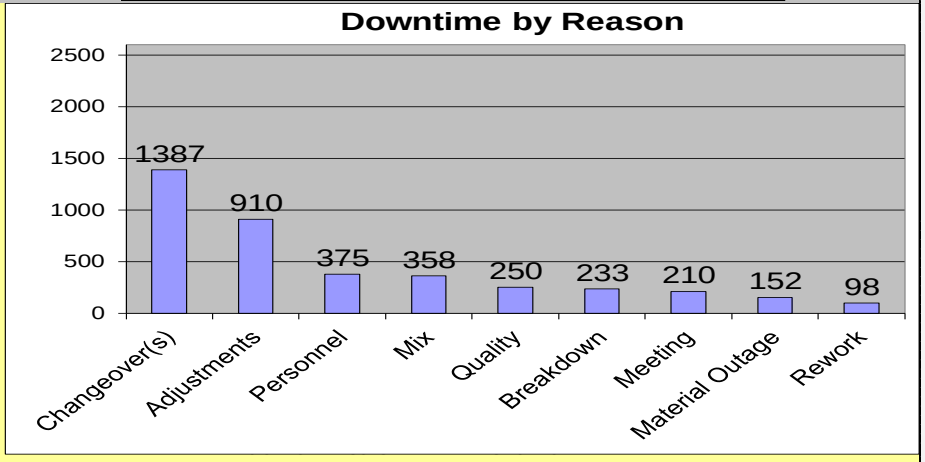

Key Process Indicators
Team
Process
Customer
E
Q
D
C
SS

Root Cause Analysis

COUNTERMEASURE FORM

AIP (TTIs) or KPI: **SCHEDULE ATTAINMENT** OWNER: **TERESA LENTZ / JACOB SIMPSON**



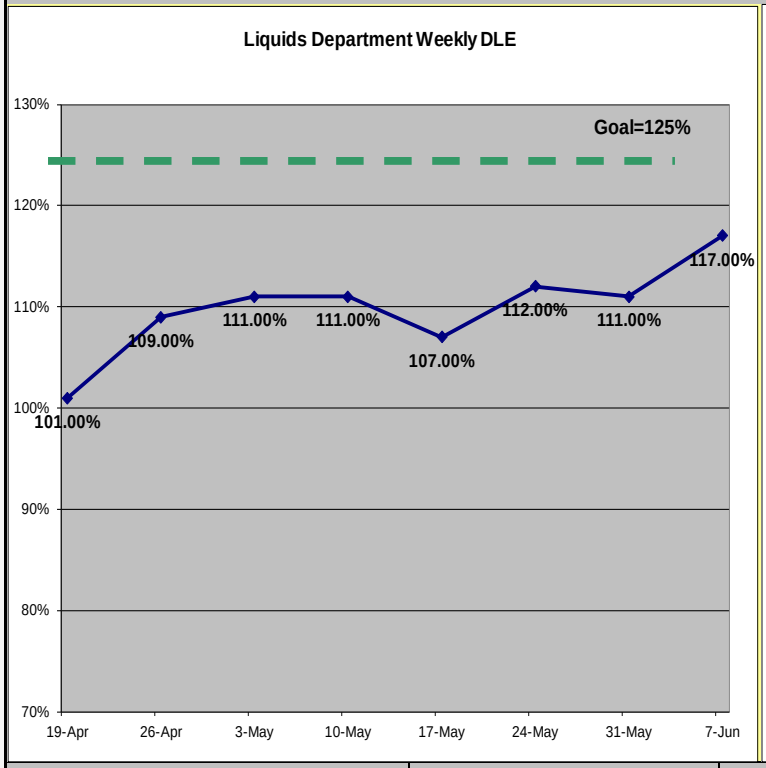


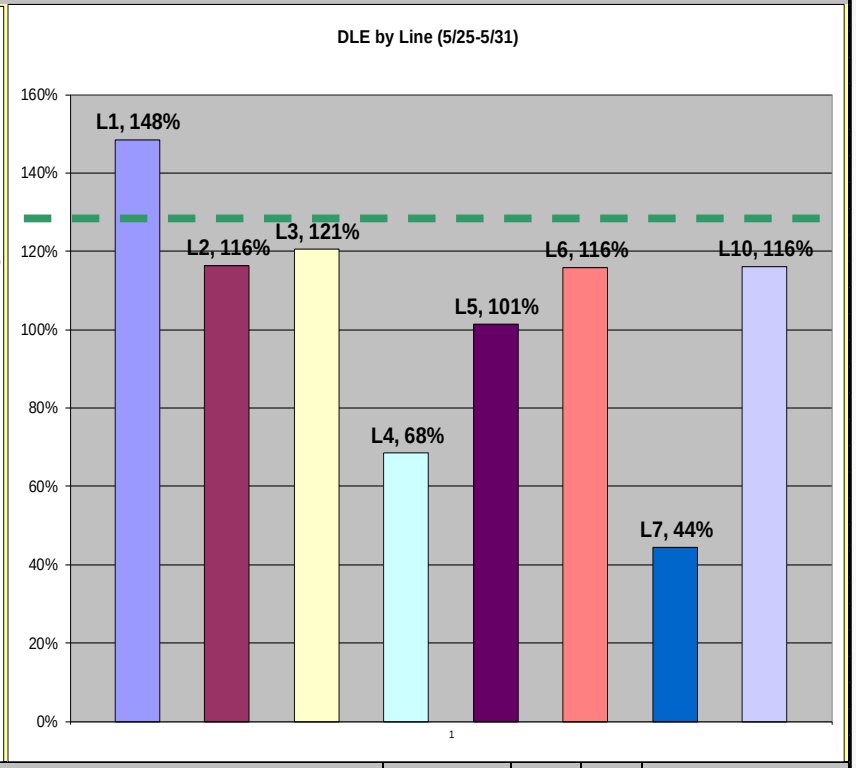
DESCRIPTION OF PROBLEM	ROOT CAUSE(S) OF PROBLEM	COUNTERMEASURE	ASSIGNED TO	COMPLETION DATE	Impact %	Status 25%	50%	75%	100%
Line 3 schedule attainment was 61%	Bleach adjustment to mix	short term--check tank scale (suspect)	Brian	6/5/2009	30%				
Line 3 schedule attainment was 61%	814 gallons short of mix. Mix w/o was created short; previous w/o's were over-produced; rework addition to mix questionable	mixing / planning to complete 5-why investigation for recommendation	Brian / Janet	6/5/2009	25%				
Line 4 schedule attainment was 56%	No AmmonyxLo for FMILDEW Formula.	mixing / planning to complete 5-why investigation for recommendation	Brian / Janet	6/4/2009	60%				
178 Minutes of Downtime on L4 Labeler	Excessive Adjustments	Collect Labeler Specific Downtime Data	Pat	6/19/2009	40%				
178 Minutes of Downtime on L4 Labeler	Escalation Protocol & 5 Why Rules not being followed	Recommunicate Escalaton Protocol and 5 Why Rules	Jake/Teresa /Jesse	6/15/2009					

COUNTERMEASURE FORM

AIP (TTIs) or KPI: C- DLE

OWNER: Teresa / Jacob



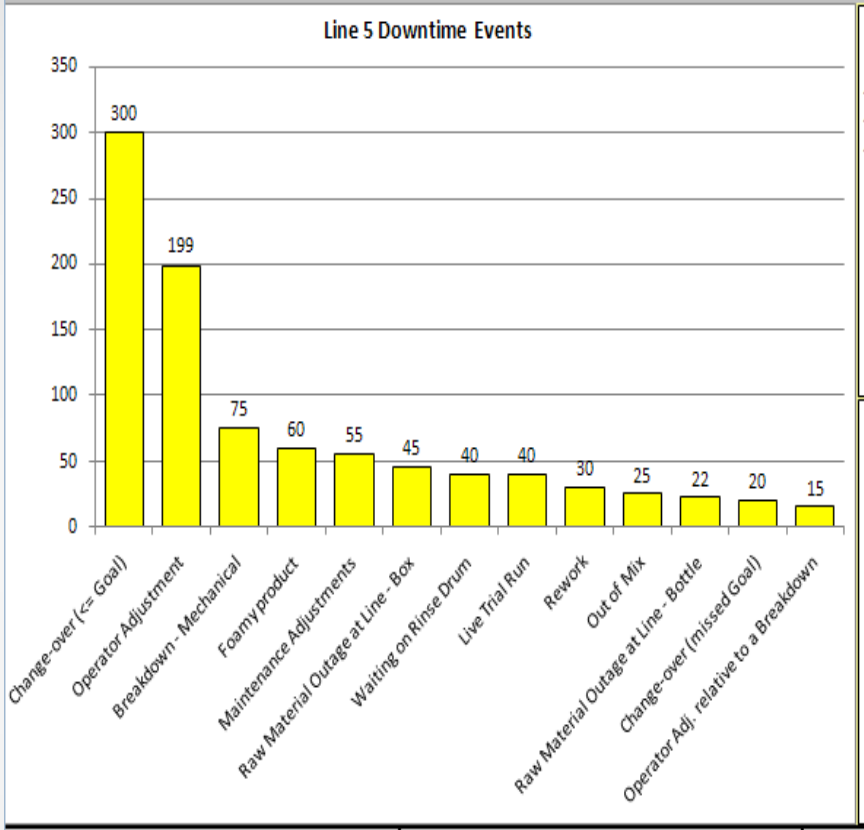


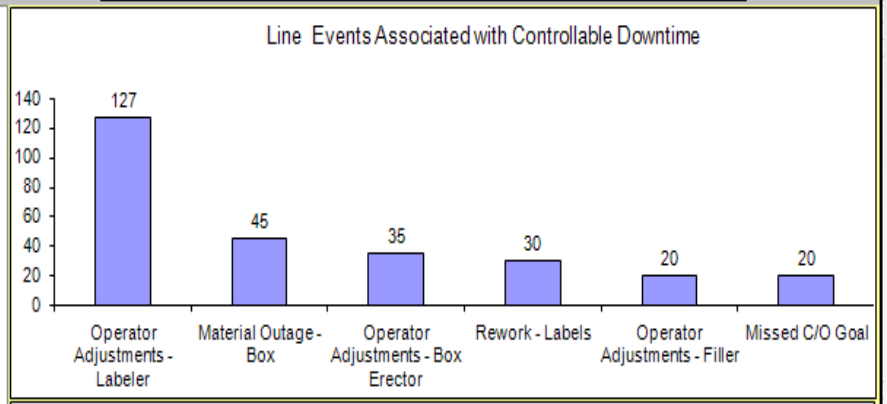
DESCRIPTION OF PROBLEM	ROOT CAUSE(S) OF PROBLEM	COUNTERMEASURE	ASSIGNED TO	COMPLETION DATE	mpact %	Status 25%	50%	75%	100%
unable to achieve goal on DLE	excessive downtime with adjustments	Mandate use of unplanned downtime sheets to determine where events can be held to eliminate downtime	Pat/Teresa	#####	25%				
Line 3 DLE was 62%	conflicting personnel issues and GFW rsan line	counseling with group and bringing forward personnel to assist when operator is out.	Marcus/Jesse	#####	30				
Line 2 DLE was 88%	Box was out of spec for new product	Sourcing to replace existing box	Wes	#####	35%				
Line 4 DLE was 68%	Ran out of DIVZURTUA	5 WHY requested	Planning/Logistics	9-Jun	35%				

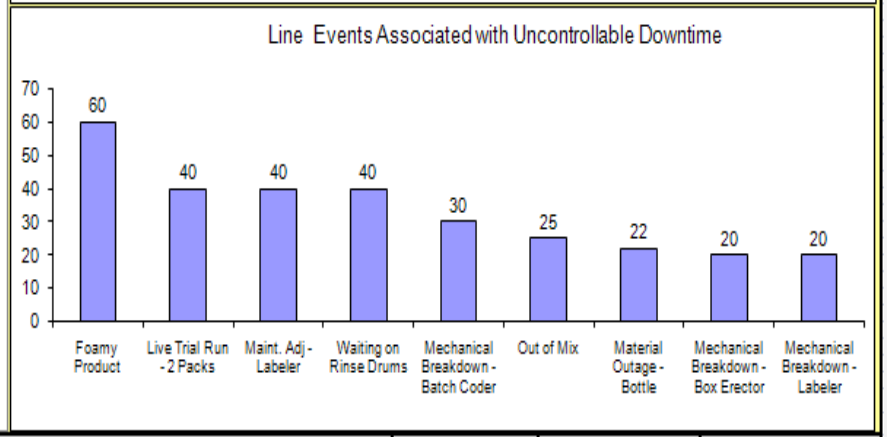
COUNTERMEASURE FORM

AIP (TTIs) or KPI: **Line 5 (1st Shift)**

OWNER: **Darrell Radford / Cell Leaders**



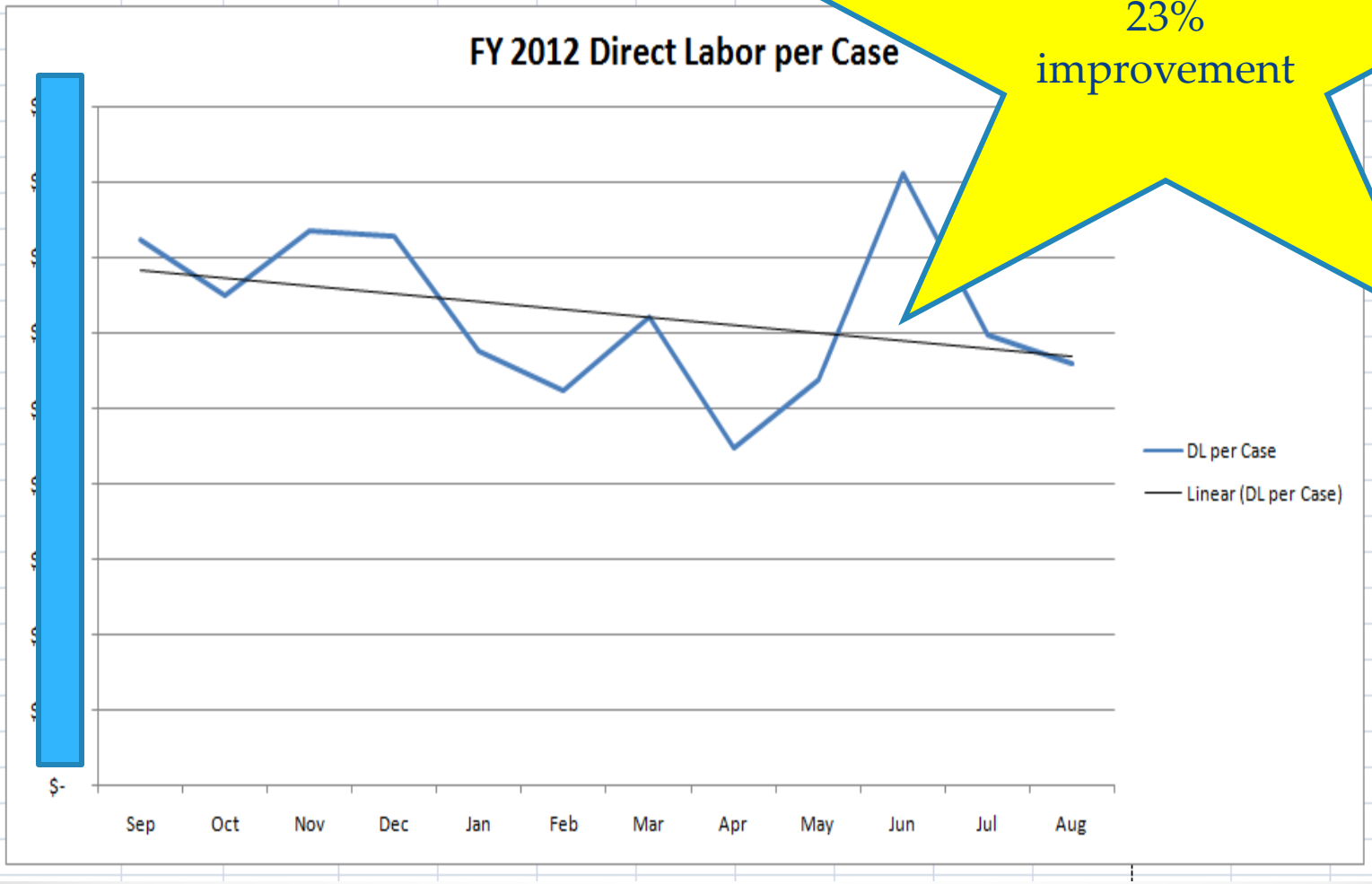




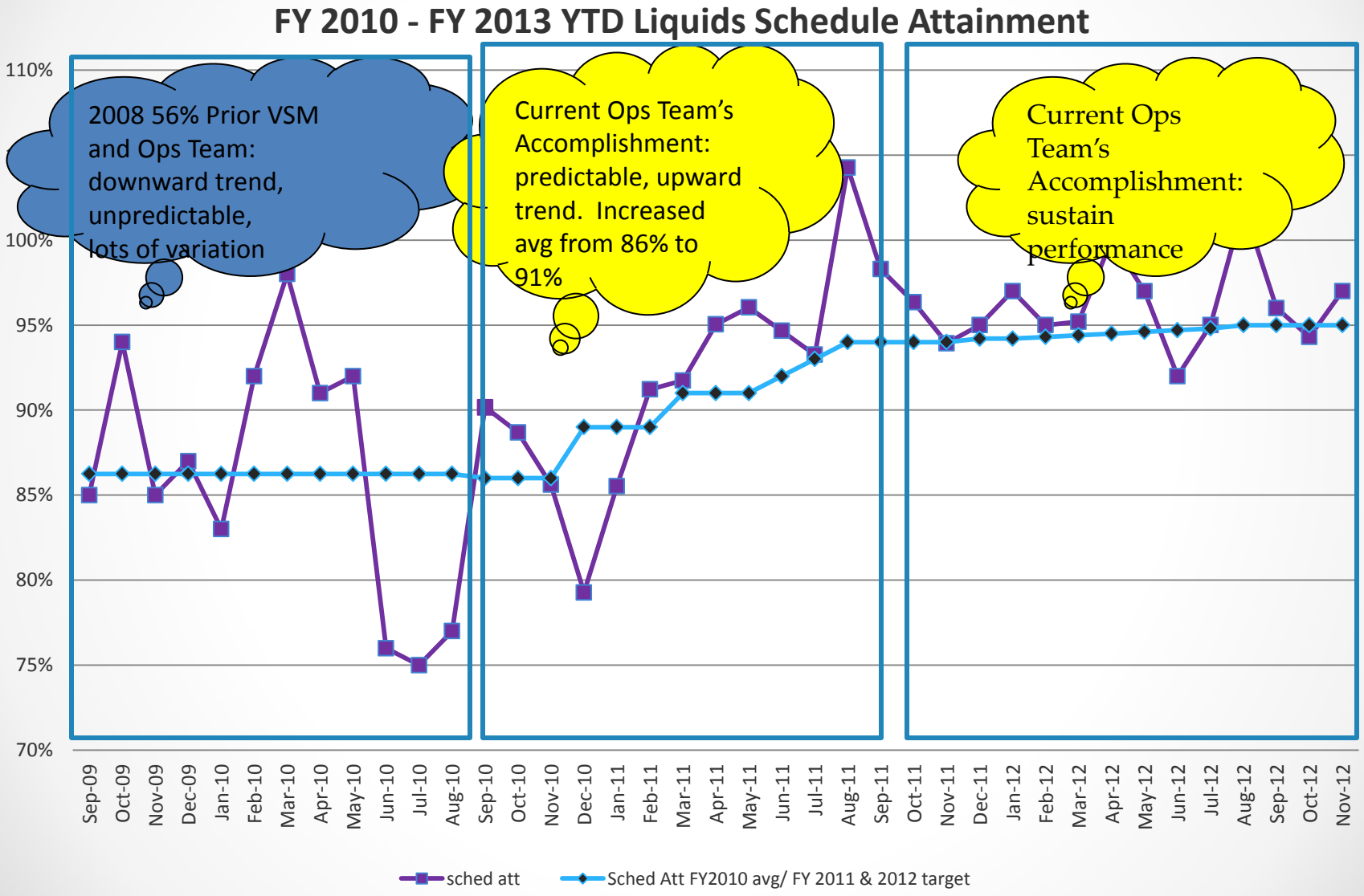
DESCRIPTION OF PROBLEM	ROOT CAUSE(S) OF PROBLEM	COUNTERMEASURE	ASSIGNED TO	COMPLETION DATE	Status			
					25%	50%	75%	100%
12-9-12 Operator Adjustments - Labeler - ZUPPWC160 labels wrinkling on btls.	Labels wrinkling during application to the btl, impossible to apply label perfectly & is a struggle to have it apply in such a way to meet approval specs - even with leniency.	Finish out the 5Q btls and move forward with the in-mold btls.	James	12/14/2012				

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		Aug	TOTAL
Liq Cases Produced	210,233	172,372	162,885	209,719	281,472	266,900	213,843	355,583	326,052	251,736		227,190	2,912,886
Liq Direct Labor													
DL per Case													
Savings													-23%

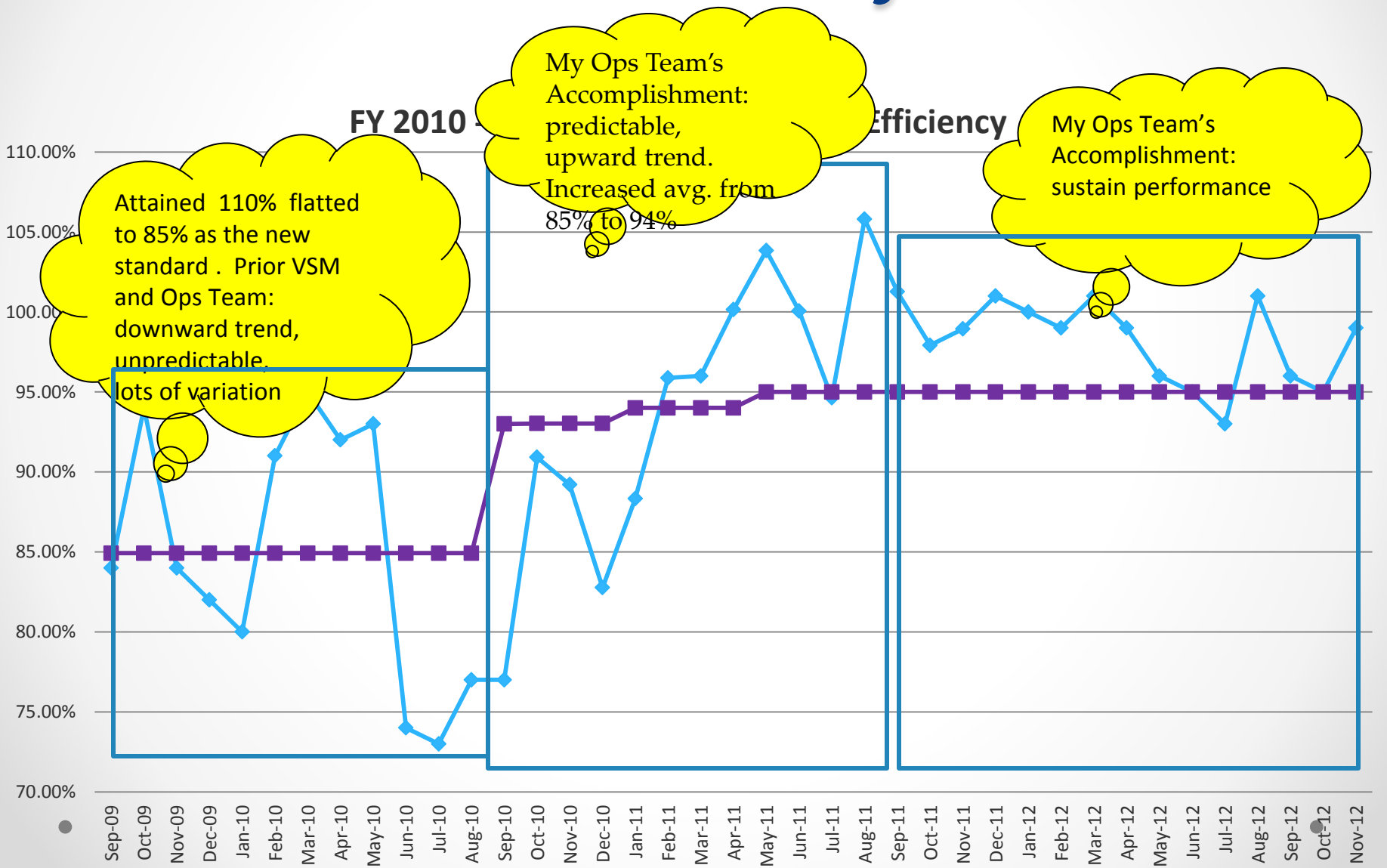
23% improvement



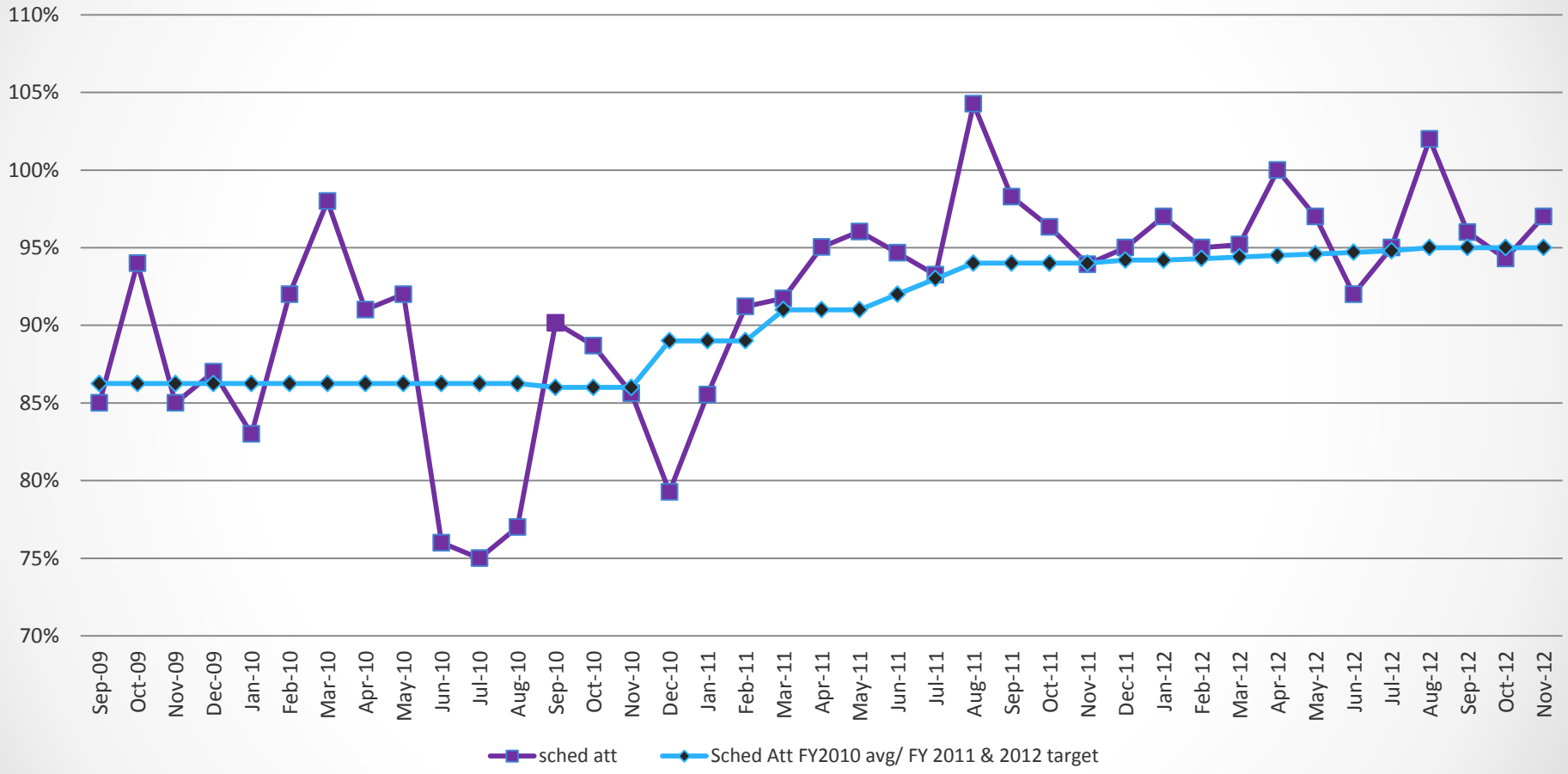
KPI: Schedule Attainment



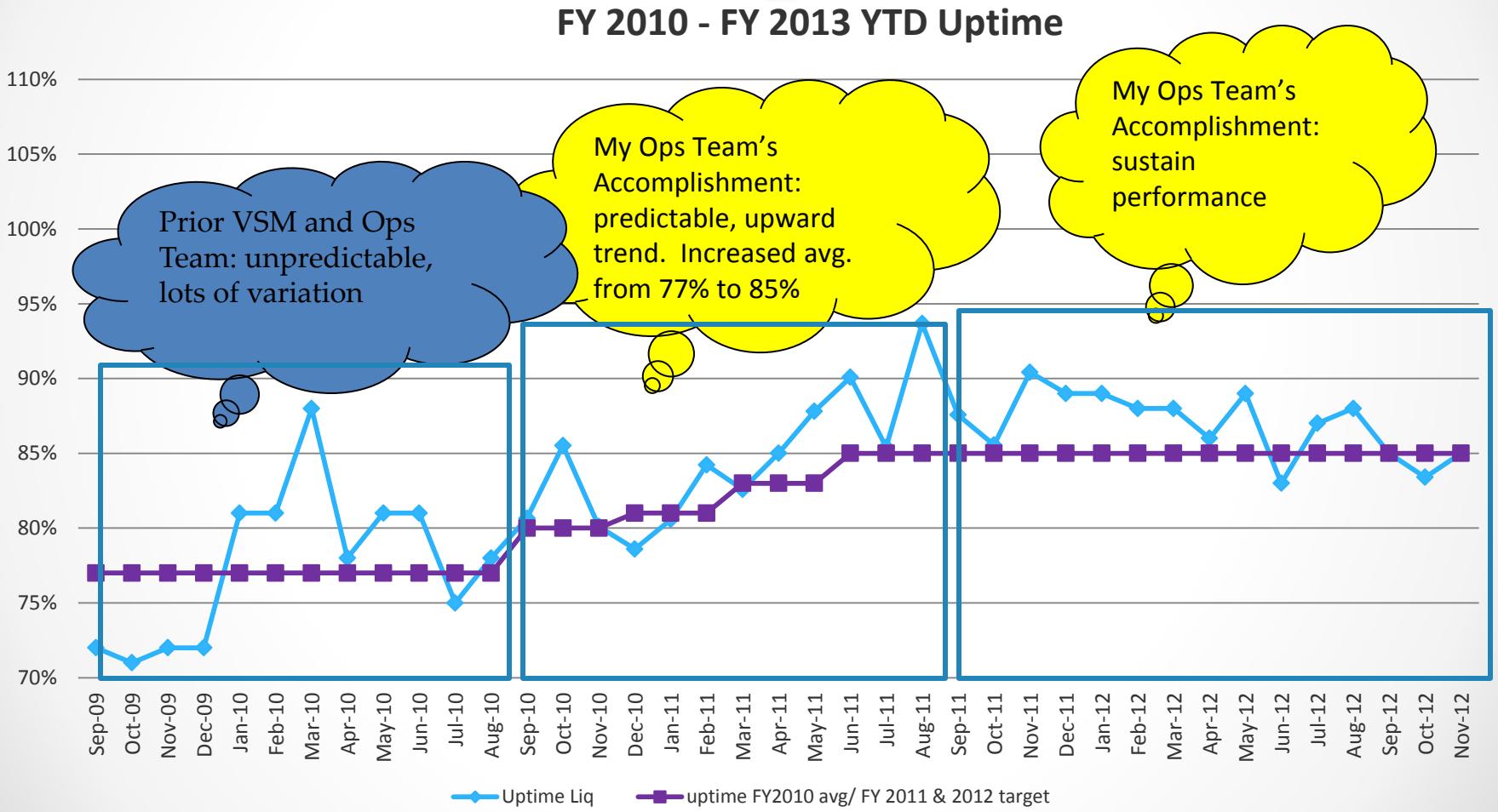
KPI: Daily Labor Efficiency



FY 2010 - FY 2013 YTD Liquids Schedule Attainment



KPI: Uptime


FY 2010 - FY 2013 YTD Uptime
110%
105%
100%
95%
90%
85%
80%
75%
70%
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
Oct-10
Nov-10
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May-11
Jun-11
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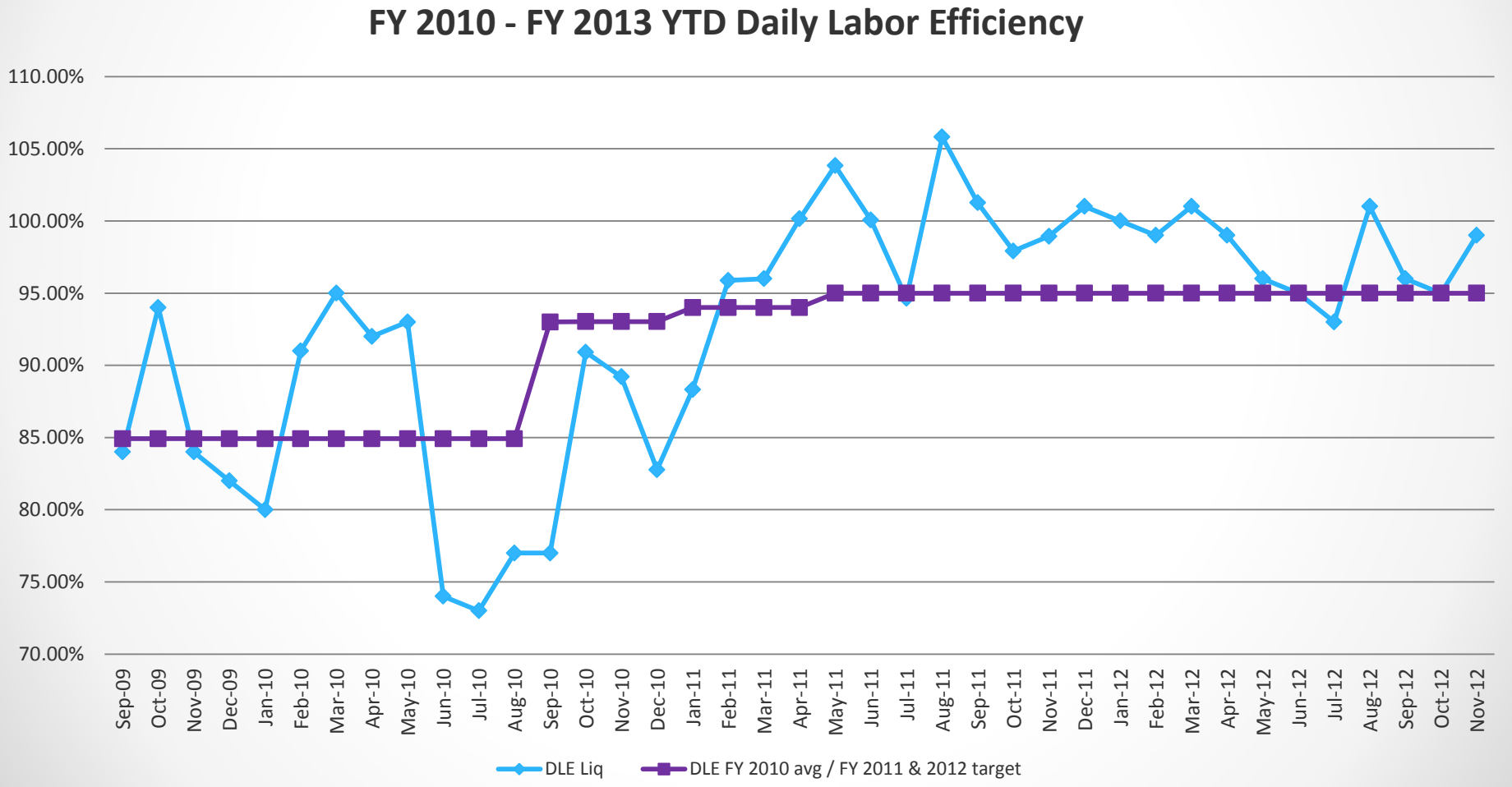
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Prior VSM and Ops Team: unpredictable, lots of variation
My Ops Team's Accomplishment: predictable, upward trend. Increased avg. from 77% to 85%
My Ops Team's Accomplishment: sustain performance
Uptime Liq
uptime FY2010 avg/ FY 2011 & 2012 target


FY 2010 - FY 2013 YTD Daily Labor Efficiency
110.00%
105.00%
100.00%
95.00%
90.00%
85.00%
80.00%
75.00%
70.00%
Sep-09
Oct-09
Nov-09
Dec-09
Jan-10
Feb-10
Mar-10
Apr-10
May-10
Jun-10
Jul-10
Aug-10
Sep-10
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Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
DLE Liq
DLE FY 2010 avg / FY 2011 & 2012 target

KPIs Retail Supply Chain

	2007	2008	2009	2010	2011	
Environmental Health & Safety Lost Time	18 2	7 0	5 2	4 0	1 0	
Quality T1	89%	96%	96.79%	97%	98.3%	
Service Rate	94.6	99.4	99.6	99.8	99.4	
Lead Time Days	5.6	3.1	3.00	2.56	2.6	
Percent of Sales	19.6%	14.8%	11.5%	12.8%	12.4%	
Schedule Att.	79%	84%	88%	87%	92%	
Direct Labor Efficiency	63%	83%	115%	*114%	120%	
Uptime	36%	71%	83%	80%	85%	

Biggest Award

Awards and Honors

- Manufacturer of the Year
- First Site to Perfect EH&S Audit
  - Four Years in a Row
- First Site to Perfect the Business Continuity Process
  - Three Years in a Row
  - Ice Storm Proof!
- No deviations on Federal Annual and Surprise Audits
  - Consumer Protection Agency
  - DOT Hazmat
  - Environmental & State Dept. of Natural Resources
- 3.00 on Gall-up Survey
- Letters of Thank and Acknowledgment
  - The Home Depot, Ombudsmen, DuPont, EPD, Chamber of Commerce

Learning's & Reflections

- Put the Right Team on the Field
- Utilize everyone's Strength's
- Eliminate Toxic Teammates
- Front load with Talent
- Goal, Roles, Procedure Expectations
- Continuously Measure
- Professional Coach, Consultant
- Celebrate and Document the Journey
- Gemba, Gemba, Gemba!!!

?? QUESTIONS ??