



Deploying the Complete Lean Daily Management System

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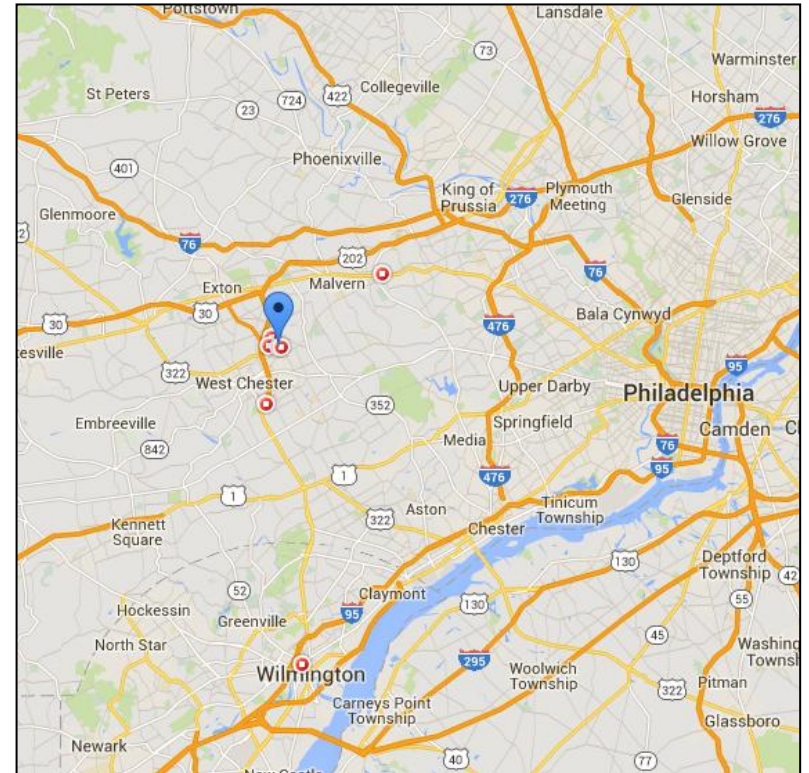
- Lean Daily Management System
- Employee Improvement System
- Change Management
- Leader Development
- Coaching Strategies
- Business Results



Site Overview



- 285 Employees
- \$70 MM operating budget
- 700K units per year
- 3,010 SKU's





Site Overview

- Machining
- Chemical Finishing
- Assembly
- Laser Etching
- Packaging & Labeling





Product Overview





Operational Excellence Strategy

Quality



Velocity



Efficiency





Theory → Practice → Results



Lean Daily Management System

A visual daily performance management system is:

Visual



Timely



**Drives Action
& Learning**





Guiding Principles for Success

Chairman Fujio Cho

Three Keys to Leadership

- Go See

- “Sr. Mgmt. Must spend time on the front lines.”

- Ask Why

- “Use the “Why” technique daily.”

- Show Respect

- “Respect your people.”

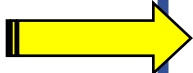




Critical Success Factors

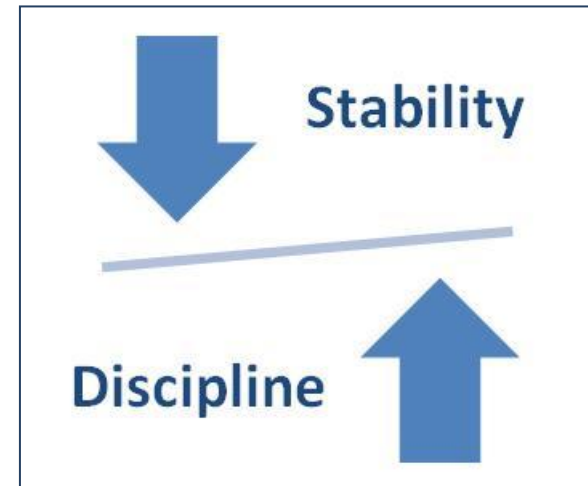
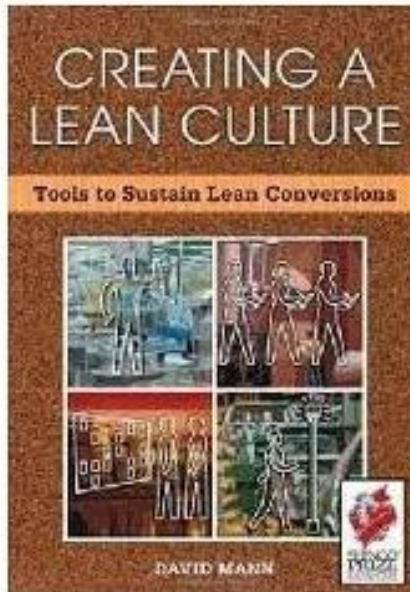
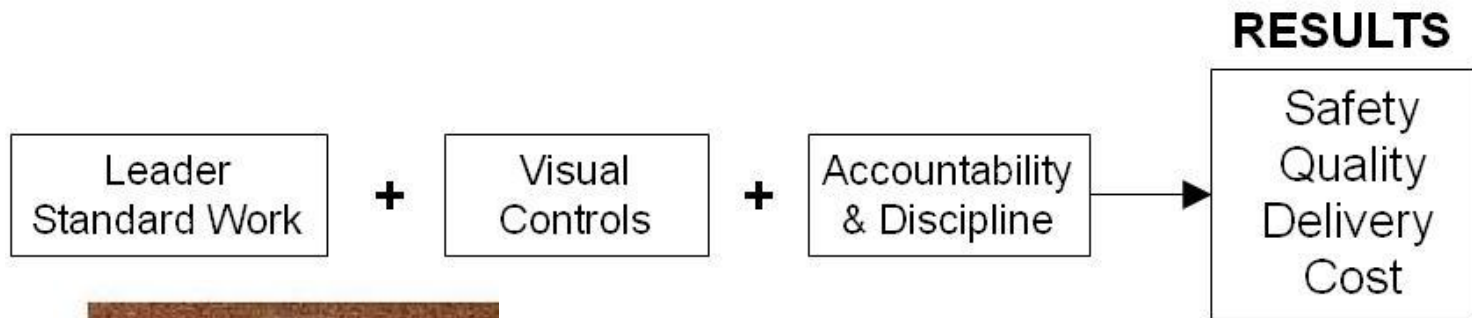
Attributes of Visual Management Tools

- Provides “understanding at a glance”
- Emphasize graphics rather than numbers and words
- Clear information actionable at the point of communication
- Maintained by those carrying out the work
- Those performing the work are the first to detect abnormalities
- Linked to high level business metrics and objectives



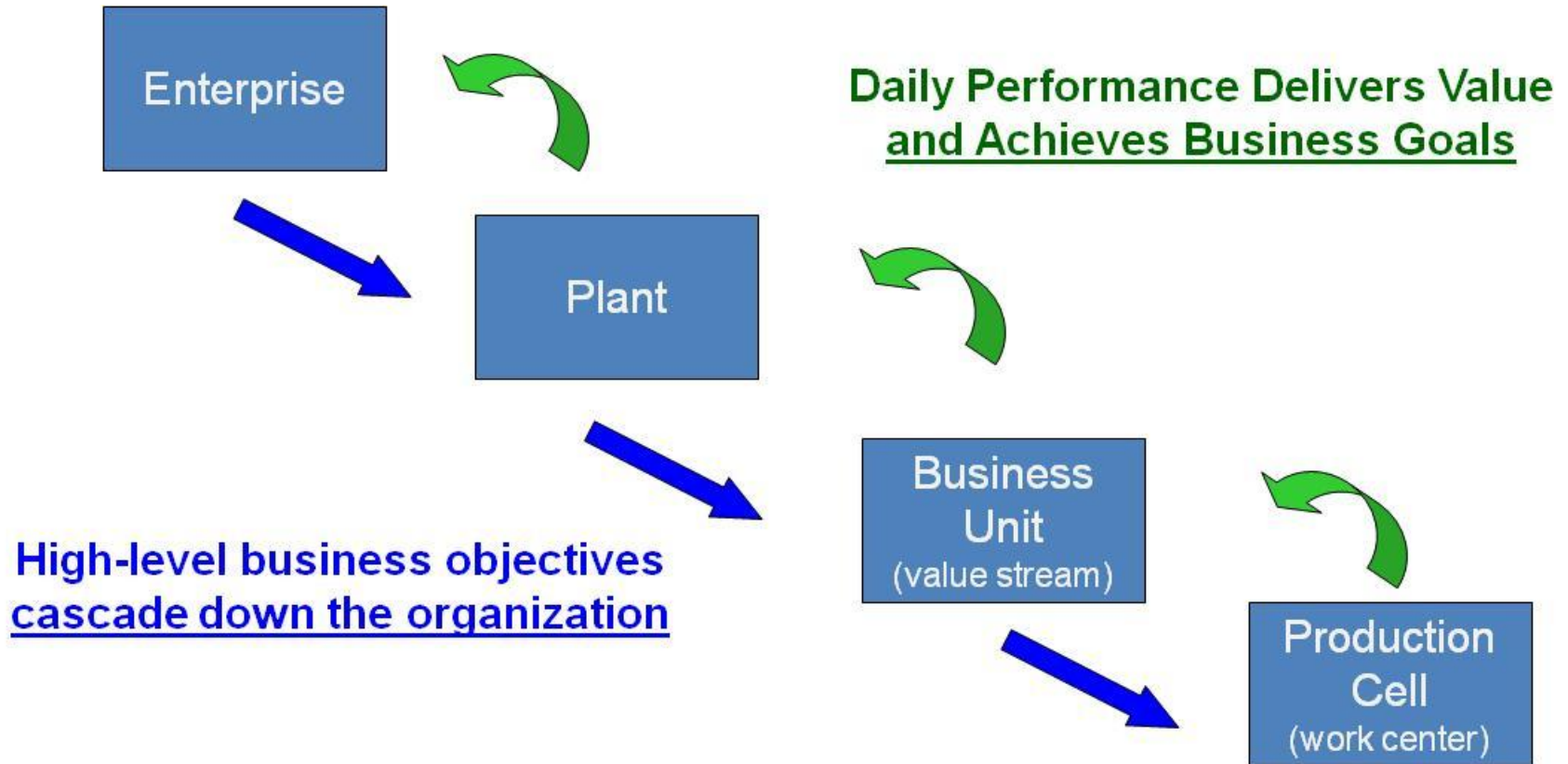


Elements of a Lean Daily Management System





Visual Controls

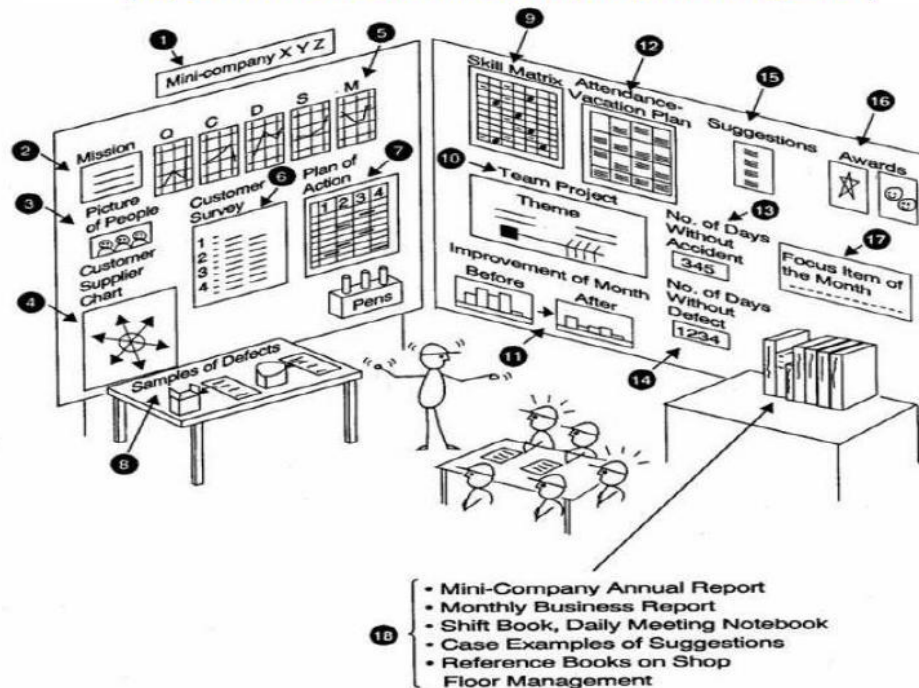




Visual Controls

*Kiyoshi,
Suzaki*

Organization of a Mini-Company Meeting Area



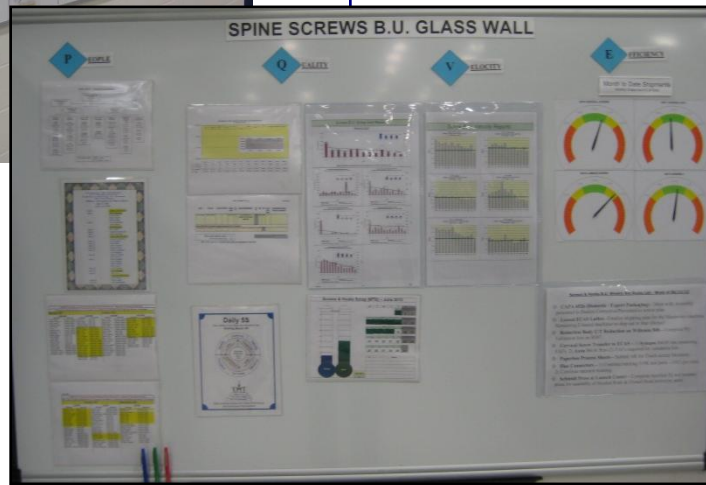


Visual Controls

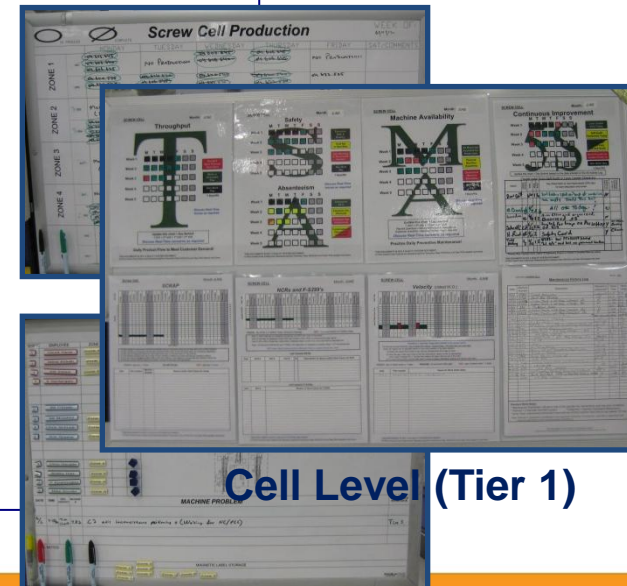
- P** People
- Q** Quality
- V** Velocity
- E** Efficiency



Plant Level (Tier 3)



Department Level (Tier 2)



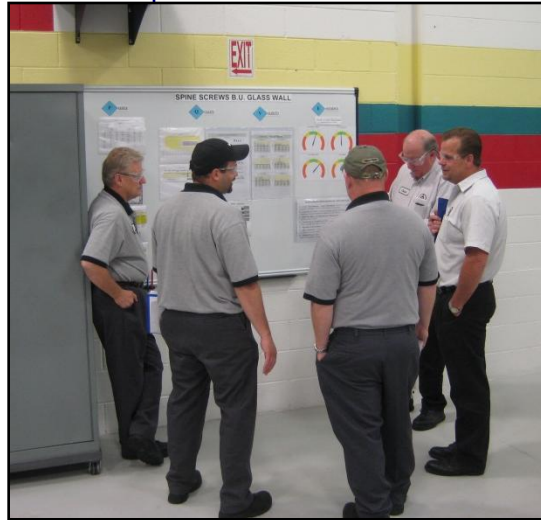
Cell Level (Tier 1)



Visual Controls combined with disciplined Leader Standard Work







Plant Level (Tier 3)



Department Level (Tier 2)



Cell Level (Tier 1)

-  People
-  Quality
-  Velocity
-  Efficiency



Leadership is Essential

"Leadership and management are two distinctive and complementary actions. Both are necessary for success ... The real challenge is to combine strong leadership and strong management and use each to balance the other."

John Kotter, Author and Professor of Organizational Behavior, Harvard Business School

"more than 70 percent of failures are driven by unproductive management behavior and negative employee attitudes"

*Keller & Price authors of **Beyond Performance***

"Soft leadership and culture boosts or blocks strategy, structure, and change initiatives"

*Jim Clemmer, author of **The Leader's Digest***



Manage Things and Lead People

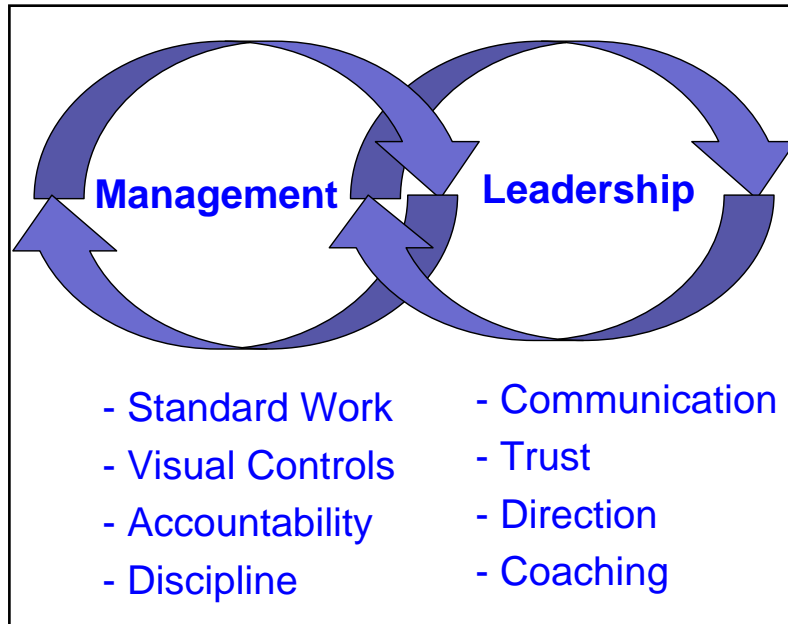
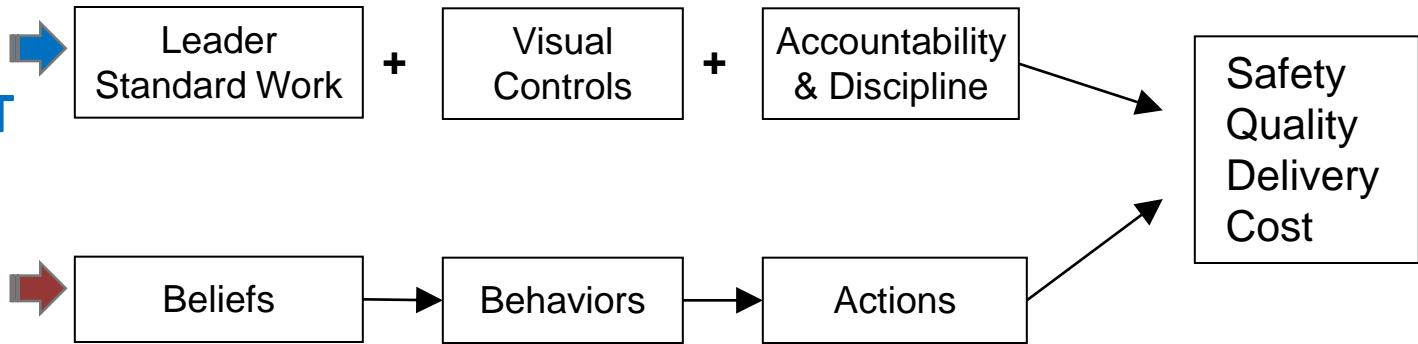
<u>Management</u>	<u>Leadership</u>
Processes	People
Facts	Feelings
Head	Heart
Position power	Persuasion power
Control	Commitment
Problem solving	Possibility thinking
Doing things right	Doing the right things
Provide Answers	Questions to promote thinking
Light a fire Under	Stoke the fire within

Jim Clemmer, author of "The Leader's Digest: Principles for Team and Organization Success"



Complete Lean Management System

LEAN DAILY MANAGEMENT



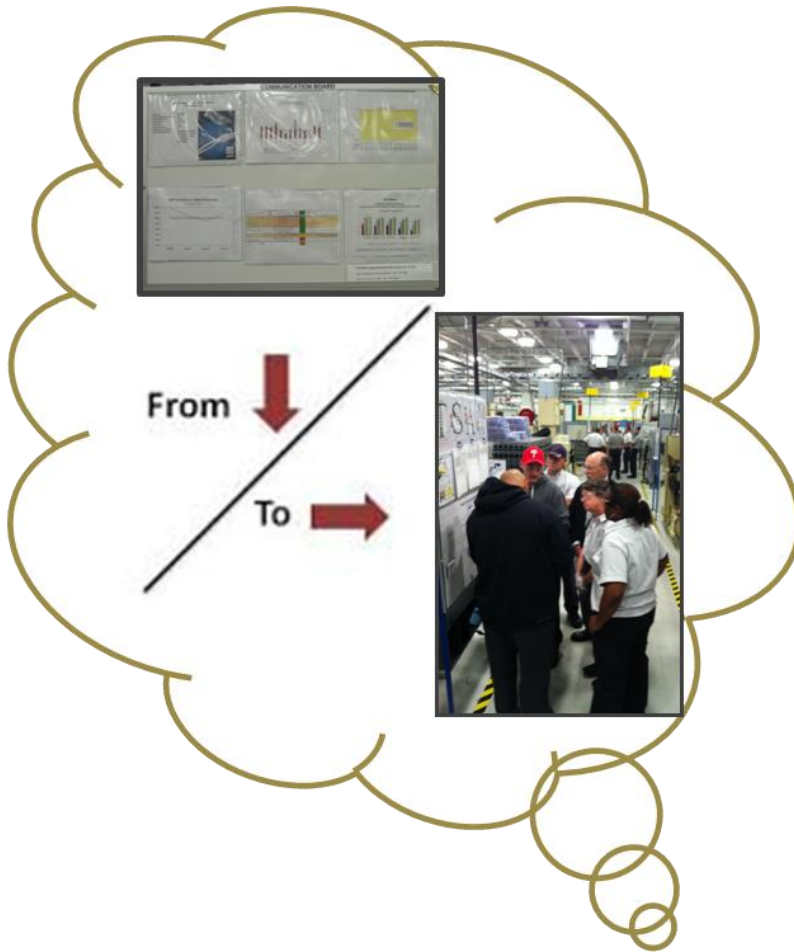


Who was asked to Change?

- **Plant Manager** ... morning meeting held on the shop-floor (not in his office)
- **Business Unit Managers** ... Standard Mgt Work
- **Supervisors** ... cell-by-cell daily performance reviews with operators
- **Operators** ... update their own daily KPIs
- **Engineers** ... engage operators in daily learning



Change Management was critical



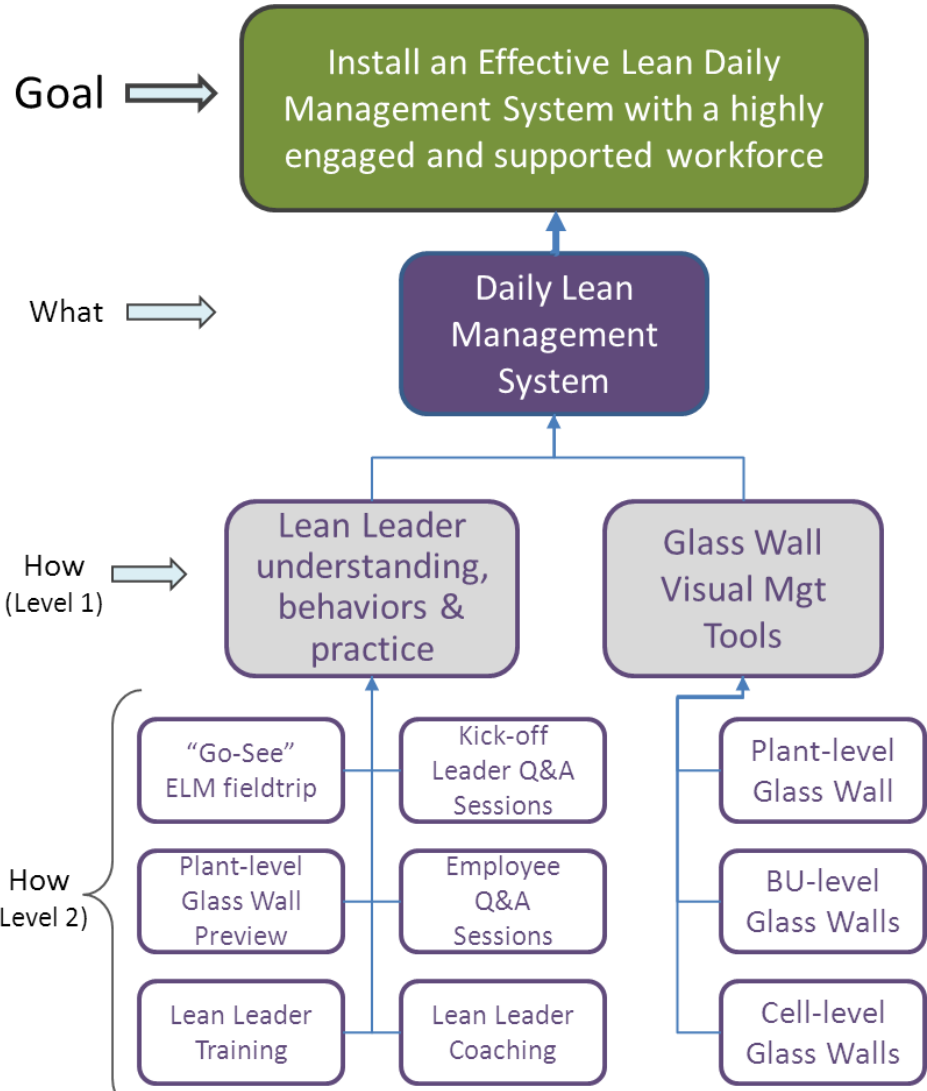
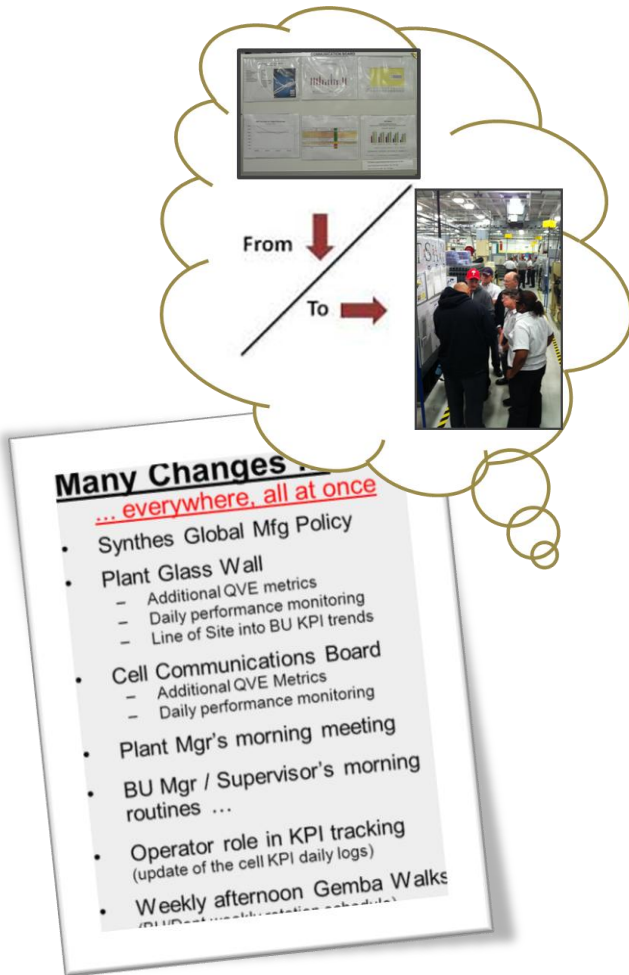
Many Changes ...

... everywhere, all at once

- Synthes Global Mfg Policy
- Plant Glass Wall
 - Additional QVE metrics
 - Daily performance monitoring
 - Line of Site into BU KPI trends
- Cell Communications Board
 - Additional QVE Metrics
 - Daily performance monitoring
- Plant Mgr's morning meeting
- BU Mgr / Supervisor's morning routines ...
- Operator role in KPI tracking (update of the cell KPI daily logs)
- Weekly afternoon Gemba Walks (BU/Dept weekly rotation schedule)



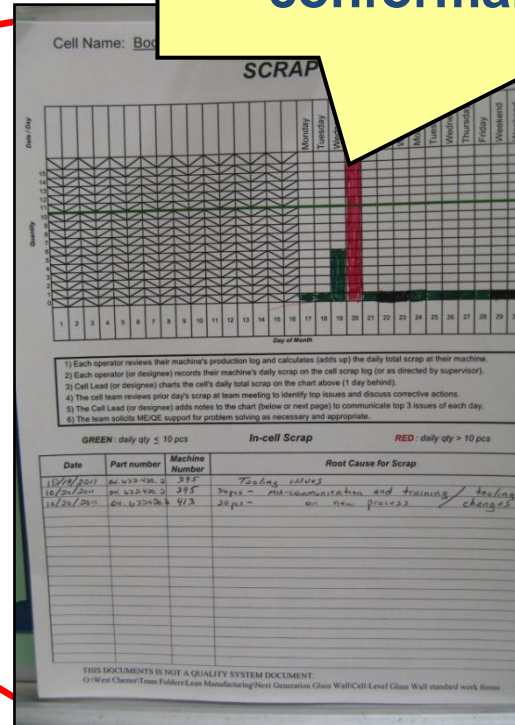
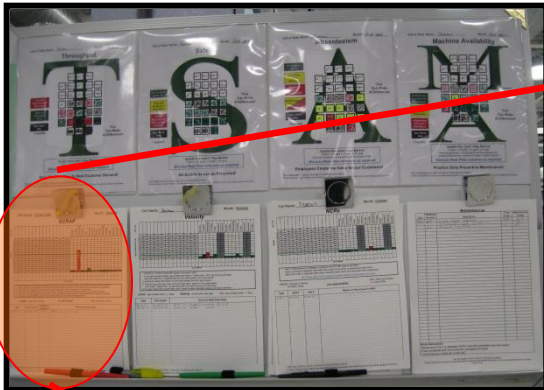
Change Management was critical





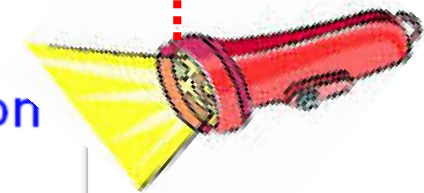
“First week” Results

Machinists discuss rare scrap event, identify inconsistency in inspection standard work and triggers management awareness to a non-conformance quality problem





The “soft stuff” is the hard work



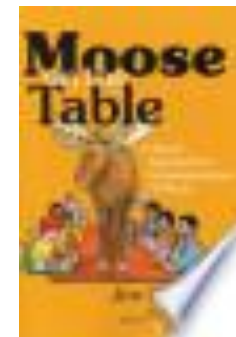
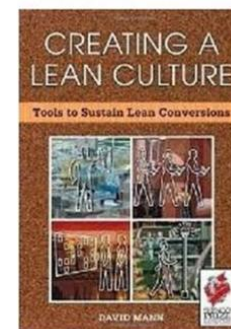
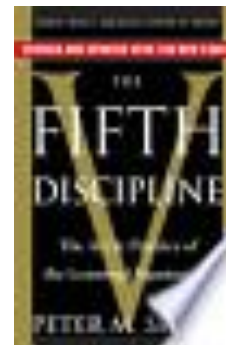
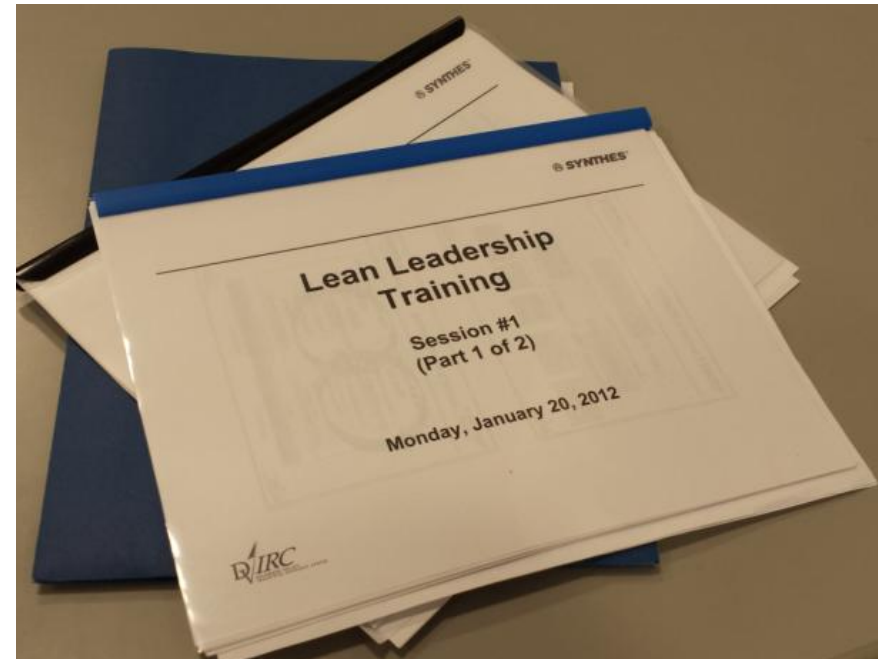


Lean Leadership Development

Session #1
Lean Management

Session #2
Gemba Walk
Coaching

Session #3
Lean Leadership

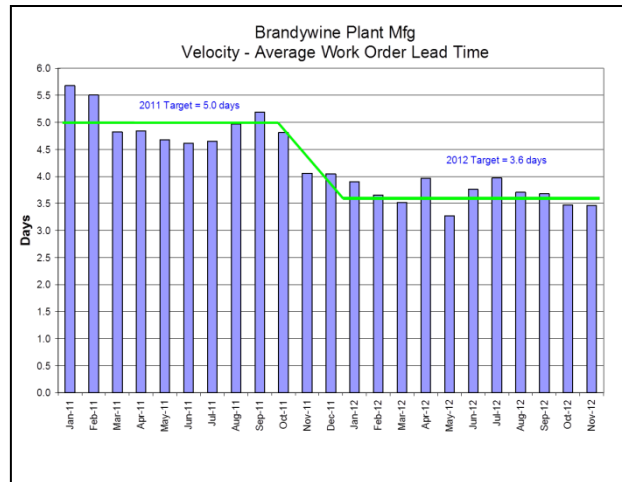




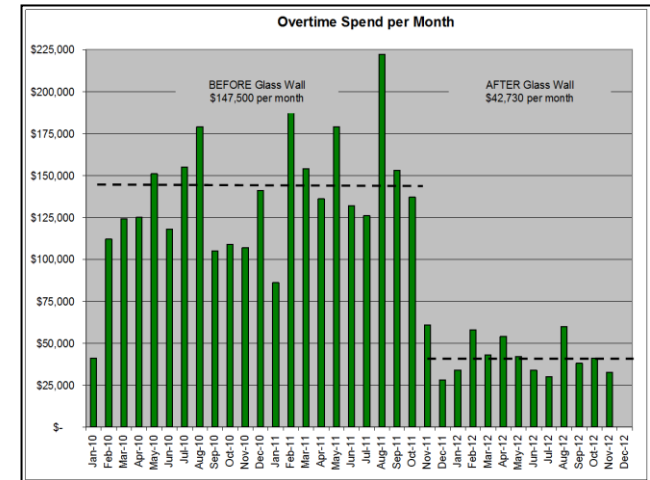
Results from our LDMS Deployment

Contributions in the first 90 days

- Work Order lead time improved 20%



- 66% reduction of historical overtime costs





Visual Continuous Improvement Process

Theory ➔ Practice ➔ Results



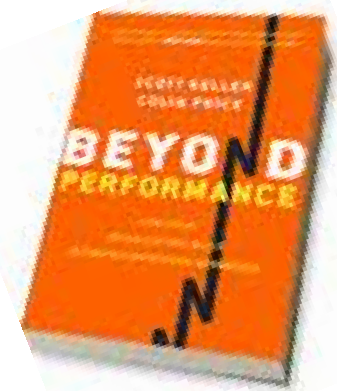
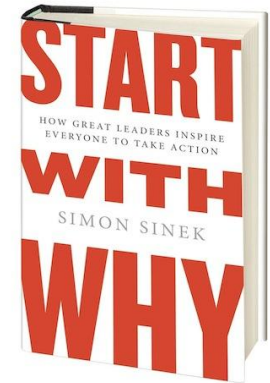
Employee Engagement is Good for Business



Top 1/4 Over the Bottom 1/4

Increases:

- 12%: Customer Loyalty
- 16%: Profitability
- 18%: Productivity
- 49%: Safety Incidents
- 37%: Absenteeism
- 60%: Defect Elimination





“Everyone has 3 Jobs”



People in Teams Drive Performance



Let Employees Drive Innovation

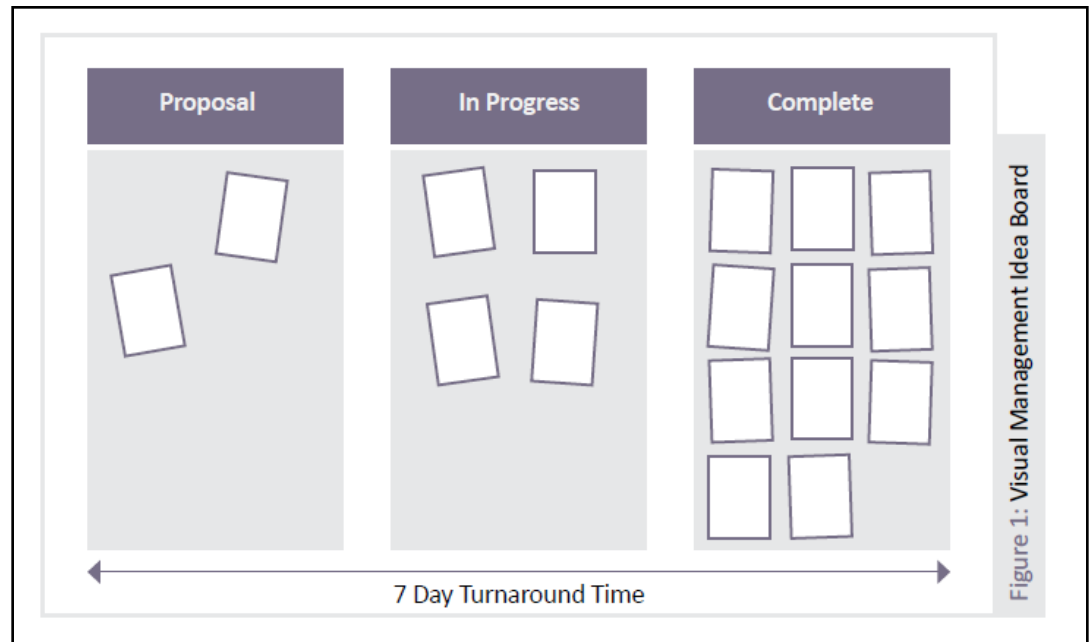
WHY DO EMPLOYEES STEP FORWARD WITH IDEAS?

- They trust that they will be listened to and supported with implementation;
- They want to eliminate impractical things that they have to do;
- To make their jobs easier and more interesting;
- There is nothing more frustrating than watching money being wasted.

LEAN MANAGEMENT JOURNAL

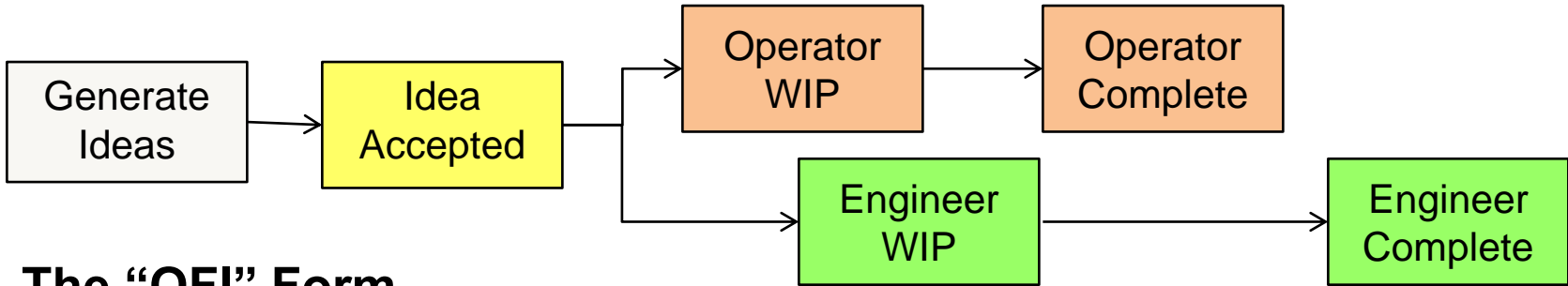
Issue 6 Volume 2 | July/August 2012 | www.leanmj.com

Visual Improvement Idea Management (by the employees for the employees)





Our Employees Driving Innovation



The "OFI" Form

OFI OPPORTUNITY FOR IMPROVEMENT

Name: _____ Date: _____

Product Family: _____ Part Number: _____

Part Name: _____ Process / Machine Number: _____

Idea Category: (circle)
 Safety (SA) Scrap/Rework reduction (QA) (Set-up Time (ST) Cycle Time (CT)
 Machine Utilization (MU) Other (OT) _____

Current Situation

Recommended Solution

Implemented Solution and Savings

Accepted for Project List: YES _____ NO _____

Date reviewed _____ OFI assigned to _____

Reviewer Initials: _____ Completion Date _____

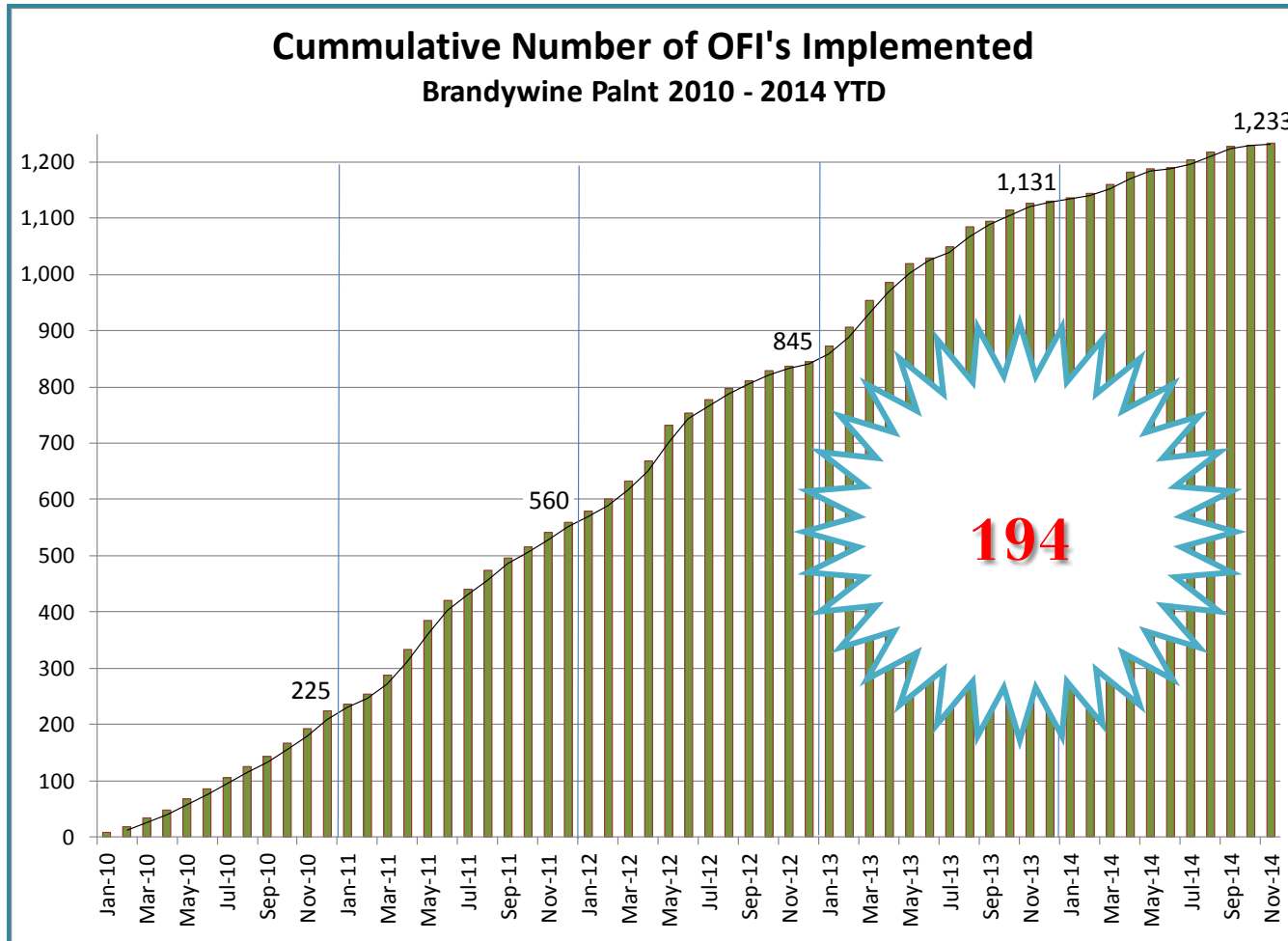
© West Chester Umplants/Cell 10/OFI Projects/OFI Form - revised 8-15-07.doc





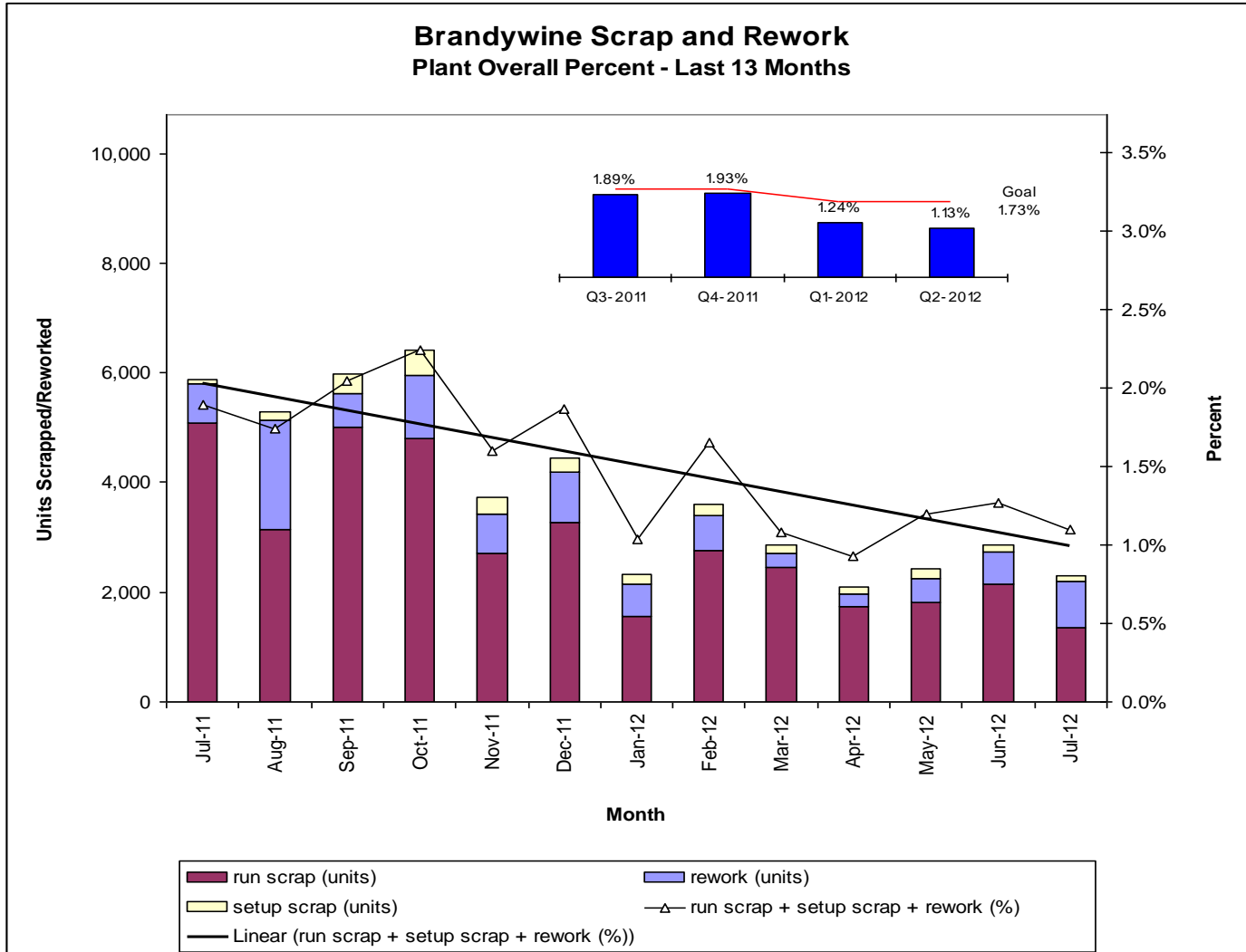
The "OFI System"

... our Kaizen Promotion Office








Impact on Quality





Long-Term Performance Trends

	LDMS				% Improved
	YR -1	YR 0	YR +1	YR +2	
 Quality First Pass Acceptance Rate (%)	97.5%	98.5%	99.2%	99.2%	
 Velocity Non-Conformance Rate (%)	2.5%	1.5%	0.8%	0.8%	68%
 Efficiency Scrap & Rework %	2.1%	1.9%	1.2%	1.0%	52%
Velocity (days)	5.9	4.0	3.3	3.5	41%
WIP Turns (component inventory)	8	26	31	23	188%



Daily Communications for Great Performance and Continuous Improvement





Thank You!

Please complete the session survey at:
www.ame.org/survey

Session: WP30

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