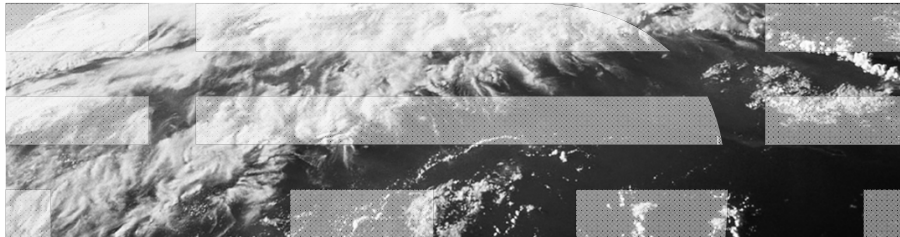


Standard Work and TWI:

The Power of Standards and TWI Job Instruction for Leaders



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Welcome!

Agenda:

- TWI at IBM, then and now
- LEAN System Implementation
- Our TWI Journey for Leaders
- Q & A

TWI at IBM, 1940 to Present

- TWI used extensively at IBM during WWII
- Evidence of continuing use after the war...
- Rediscovered in IBM's Essex Junction, VT semiconductor manufacturing facility in 2005
- Currently 3,500+ people trained in Job Instruction
- Expanding to MFG Support Teams



IBM Schoolhouse, Endicott, NY

Tom Watson Sr. on TWI:

A RESUME of the ACTIVITIES OF MR. THOMAS J. WATSON From 1939 to 1945

"The IBM On-The-Job Training Program, or so-called Training Within Industry Plan, was of inestimable help in turning inexperienced men and women into skilled machinists, assemblers, inspectors, etc."

"Supervisory training and Job Instruction applied in IBM factories proved to be highly useful..."

IBM Poughkeepsie

- New plant...ground breaking to production in 9 months
- 6,000,000 guns in 18 months!



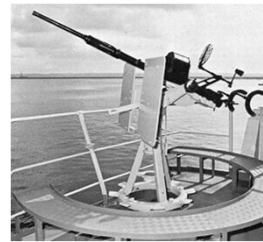
IBM War Production, Poughkeepsie, NY



M1 30 Cal. Carbine

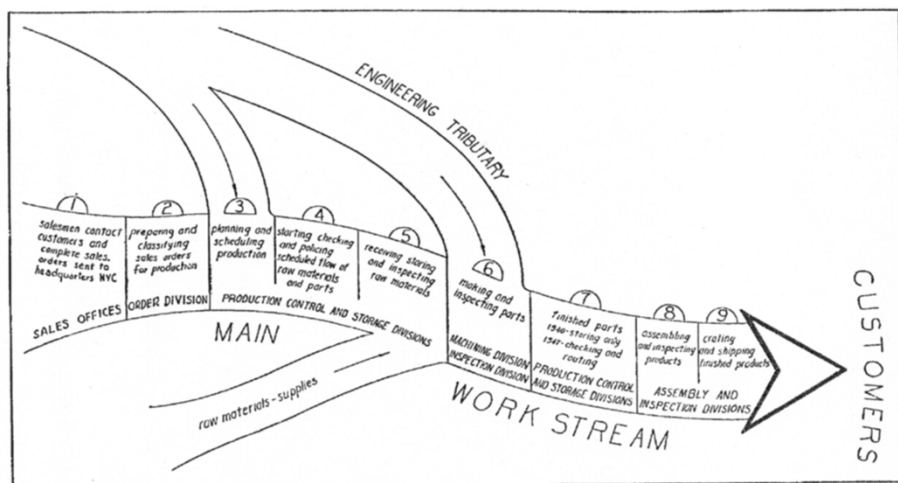


Browning Automatic Rifle



Oerlikon 20mm Cannon

Other "Lean" Activity at IBM in the 40's



TWI as an IBM Consulting Service



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IBM Systems & Technology Manufacturing Sites

Bromont, Canada
Assembly and Module Test

Burlington Vermont
Mask House
Development and Production
Semiconductor and Test

East Fishkill New York
Development and Production
Semiconductor
Development and Production
Packaging

Asia Pacific
Bond, Assembly, and Test
Vendors

Asia Pacific
Platform Partners

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IBM Product Range



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IBM's 300 mm Semiconductor Manufacturing – Fishkill, NY

- Mission:
World-class semiconductor manufacturing and development in support of the production of leading edge technologies for IBM and our OEM clients
- Wafer size: **300 mm**
- Multiple technology nodes: **130 nm, 90 nm, 65 nm, 45 nm**
- Facility:
 - "One Fab" - Technology development and manufacturing
 - 140K ft² of Fab clean room space (Class 1 Mini-environments)
 - 500 state-of-the-art manufacturing and development tools



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IBM's 200 mm Semiconductor Manufacturing – Burlington, VT

- Mission: Provide world class semiconductor products through a diverse technology portfolio and manufacturing and engineering excellence.
- Wafer Size: 200mm
- Multiple Technology Nodes: +250nm, 180nm, 130nm, 90nm
- Products: Microprocessors, Analog and Mixed Signal, Image Sensors, ASICs, Foundry
- Facility:
 - Chip Manufacturing, Wafer Test, Mask House, Technology Development
 - 725 Acre campus, 30 buildings
 - 3.5 million square feet, 450,000 square feet of cleanroom space




IBM's Mask House Burlington, VT





Mission

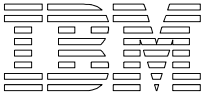
- ❑ Provides photomasks for all IBM semi-conductor wafer fabricators (200mm and 300mm)
 - Logic technology nodes from 500nm thru 22 nm
 - 24 hour/day by 7 days/week production operations
- ❑ Advanced photomask development and engineering
 - 22 nm photomask Joint Development onsite in BTV with Toppan Printing Co.
- ❑ World class photomask technical performance with better than competitive turn around times.



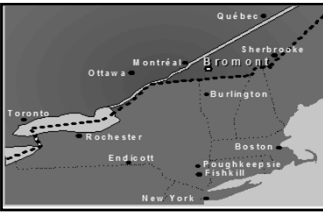
Lean Transformation Summit 2013
March 13-14







Bromont, Canada




Mission

- Module assembly and test services
- Ceramic substrate plating


Roles

- Process development and qualification
- New product introductions
- Automated volume manufacturing
- Customer support

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Lean Transformation Summit 2013
March 13-14



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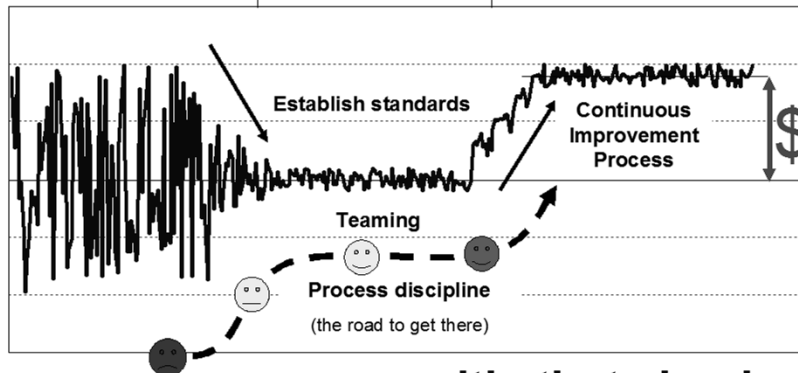


The Power of Lean Transformation

Ability to see waste and
identify variability

Remove waste
and reduce
variability

Continuous
improvement allows
improved performance
from a stable baseline



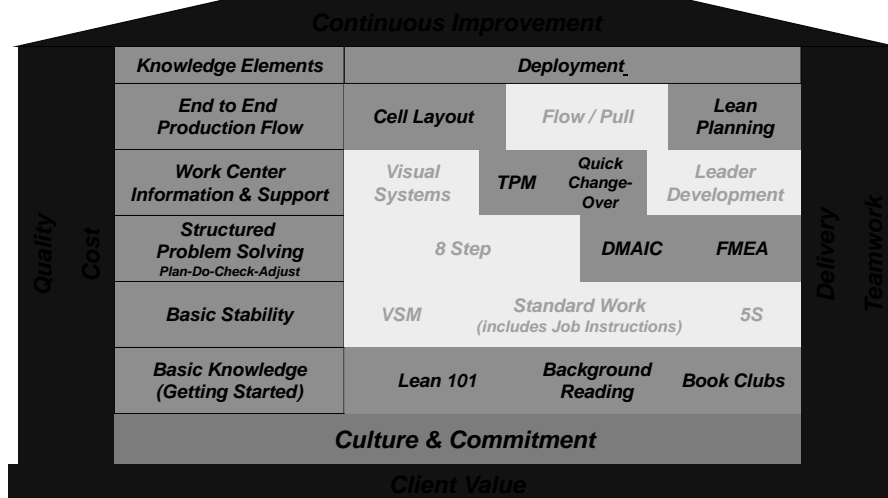
...it's that simple

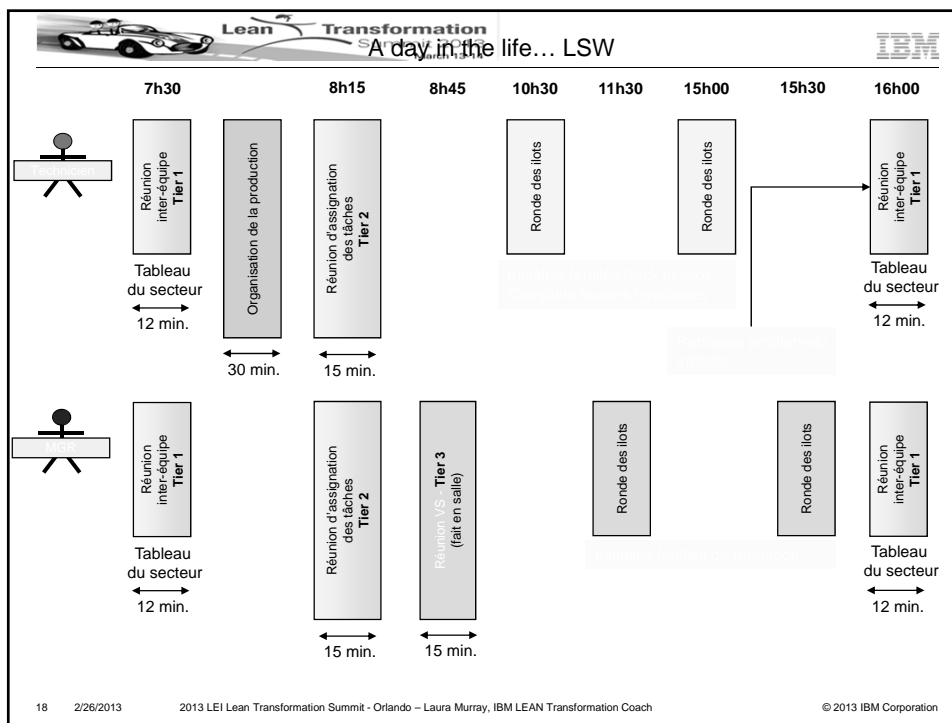
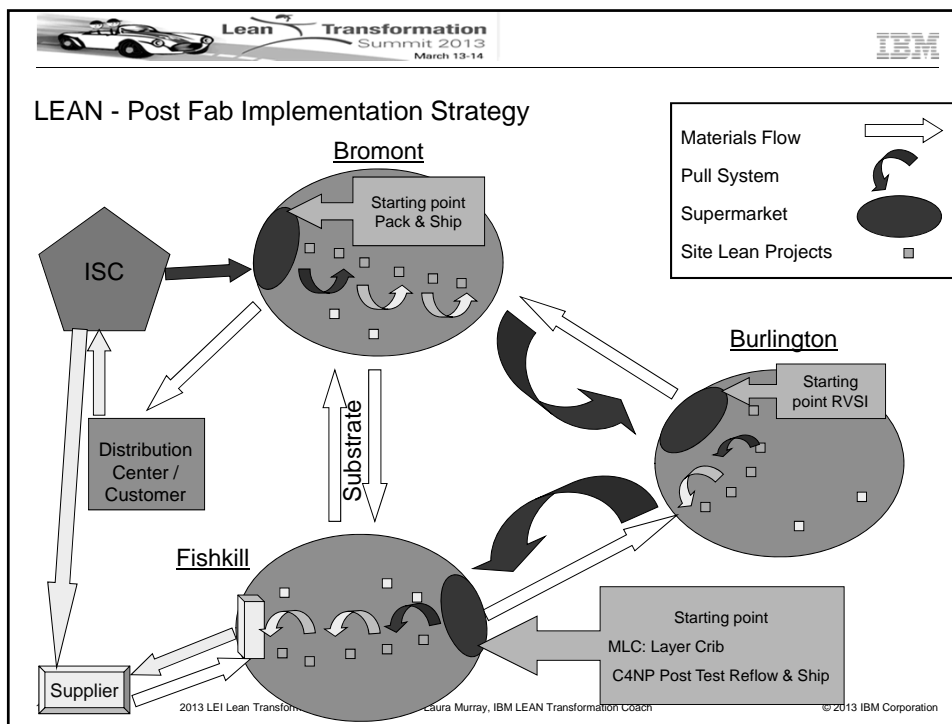


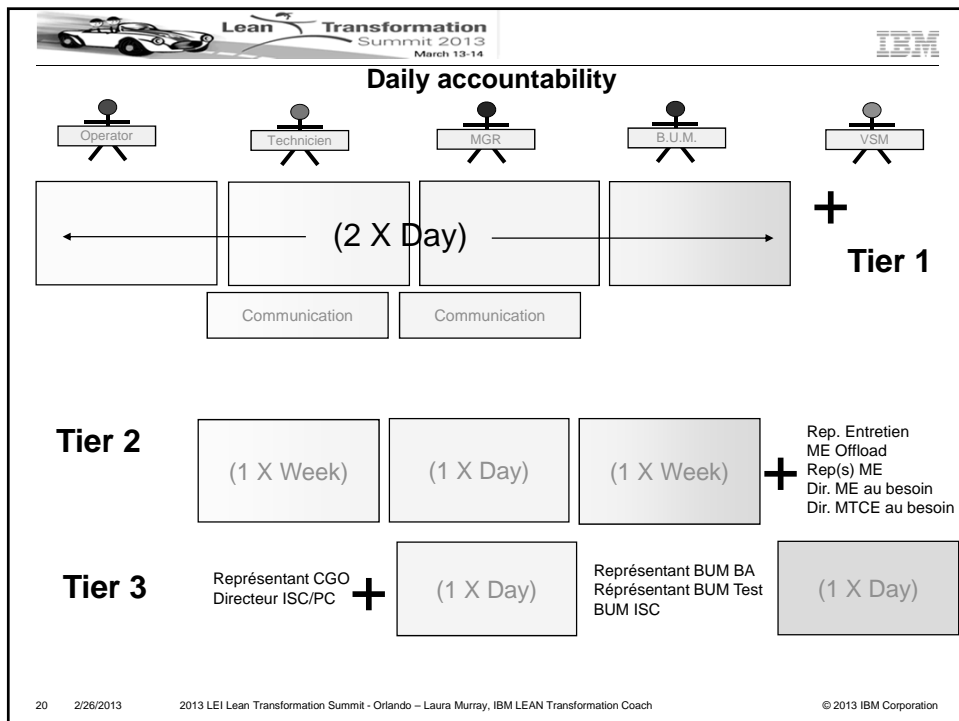
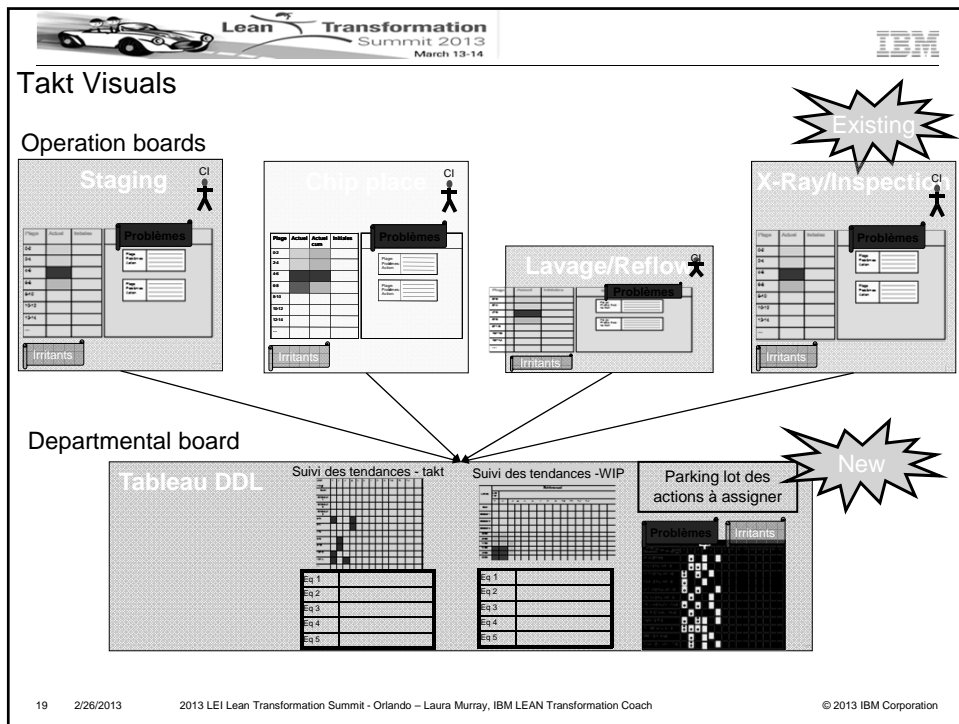
100% Defect Free
100% Value Add
100% Delivery to Customer Requests
People with a Passion to Improve

LEAN
SYSTEM

Phase I Lean Toolset







Staging - Wip



Inspection & Xray - Wip



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Departmental board



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Accountability board



Our Goal: Develop People with a Passion to Improve

THINK



What can each of us do?

“THINK” everyday about ways to improve....

Welcome!

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An Exercise

There were a lot of people in line for that movie.

About how many people were in line?

The store is far away from the house

How many miles?

Luxury cars are just too expensive.

How much is an expensive luxury car?

This desk is very old.

How old is an old desk?

Those boxes are extremely heavy.

What is the weight of a heavy box?

The shop is far from my office.

How many blocks?

There are a lot errors happening.

How many errors?

An Effective and Clearly Defined Implementation Process is Key...

Print Standard Work Strategy					
What	Why	Who	Target Date	Date Complete	Notes
Videotape Print Job Tasks	Aids in seeing variation	TL's			
Attend Std Work Class	Education on value of std work	Trainers/TL's/Eng Reps/1 st line			
Attend TWI JI Class	Training education	Trainers/TL's/Eng Reps/1 st line			
Write Print JBS's, validate accuracy	Identifies stds that impact QCD	Trainers/TL's/Eng Reps/1 st line			
Attend TWI JI Mini classes	Training education	Toolset operators			
Hold Std Work Kick-off	Emphasizes importance of stds and training	1st lines, TL's, LCT			
TWI Trainer Refresher	Practice 4 step method	Toolset trainers, LCT			
Post Visual Aids- Training Matrix	allows team to track skills	TL's			
Post Visual Aids- JBS's at tools	For operators convenience and the check process	TL's			
Enter JBS's into QMX	Quality conformance	TL's			
Complete JBS training for operators	Transfer new stds info to team	Toolset operators			
Check process Started	Ensures process will work	TL's/1st Lines/Upline			
CI Process rolled out	How are new stds are rolled out?	Team leads, toolset trainers			
MPS's restructured	Documentation clarity	Eng Reps			

Supporting Visual Aids

High End KLA JI Training Matrix

D1 Team	SLF Load	SLF Unload	SLF Setup / Prev.	SLF Setup / Recipe	SLF PSC Tree	SLF PSC 5xx Load Unload	5xx
Eddy	4/23/10	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
Graham	4/23/11	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
Magoon	4/23/11	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
Nicasio	4/23/11	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
Normand	4/23/10	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
Nelson	1Q 2011	1Q 2011	1Q 2011	1Q 2011	1Q 2011	1Q 2011	2Q 2011
Grady	2Q 2011	2Q 2011	2Q 2011	2Q 2011	2Q 2011	2Q 2011	2Q 2011
Koepke	4/23/11	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
D2 Team							
Nadeau	4/23/10	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
Peloubet	4/23/10	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10
Reen	2Q 2011	2Q 2011	2Q 2011	2Q 2011	2Q 2011	2Q 2011	4Q 2011
Brouillard	4/23/11	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	3Q 2011
Cox	2Q 2011	2Q 2011	2Q 2011	2Q 2011	2Q 2011	2Q 2011	4Q 2011
Sargent	4/23/11	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	3Q 2011
Scheider	4/23/10	5/31/10	2/24/11	7/2/10	5/31/10	7/2/10	4/23/10

TWI Job Instruction Breakdown Sheet

Important Step	Key Points	Reasons
1. Visual aid set	Visual aid set	Visual aid set
2. Visual aid set	Visual aid set	Visual aid set
3. Visual aid set	Visual aid set	Visual aid set
4. Visual aid set	Visual aid set	Visual aid set
5. Visual aid set	Visual aid set	Visual aid set
6. Visual aid set	Visual aid set	Visual aid set

Training Matrix

- Indicates that standard work has been completed within an area and shows the status of training that has taken place
- JBS**
- Represents the standard that the leader will check.
- Available to Employees for reference once they've been trained with TWI JI

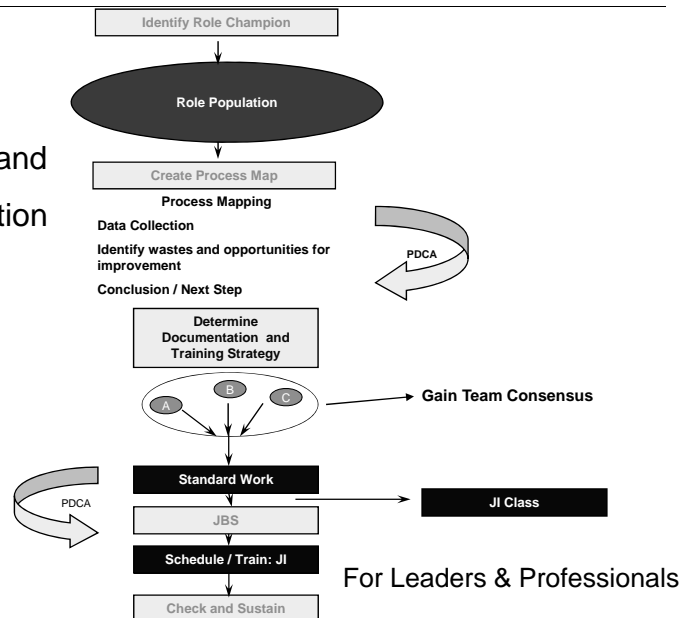
In our teams own words...

"I can honestly say from a trainers view the results are amazing and are so simplified that it has made training easier and cut out variations which we had in the past"

"TWI JI works and has cut training time down from 6-12 months to as little as 2-4 weeks."

Chad Normand – Mask House Team Member

Standard Work and TWI Job Instruction Process



[illegible]

Hyperion Environment	– CPE114 & 210
DB2 Environment	– CPE106 & 208
<u>Edit Manual</u>	– CPE207

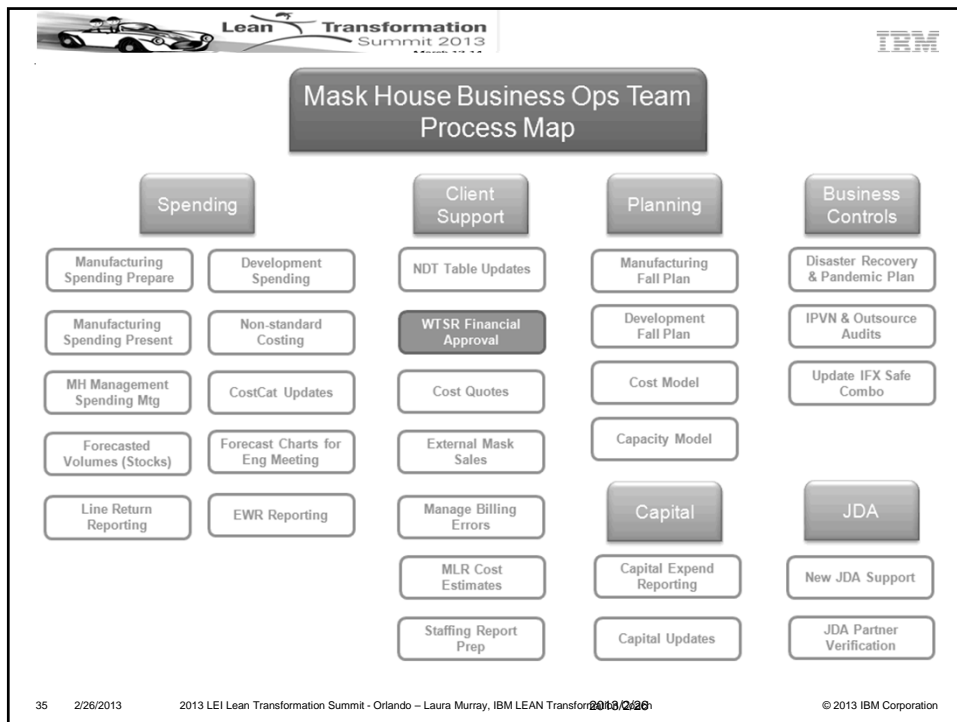
- Patrick Horton Supply Chain LEAN Core Team Member



Case Studies for Professionals and Leaders

Mask House Business Ops Standard Work

Initial Assessment



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IBM

TW Job Instruction Breakdown Sheet - Software

Operation	WTSR Valuation	
System / Software	Brio	
Information Needed	System access, passwords	
Important Terms & Acronyms	World Trade Shipping Request (WTSR) Intercompany Market Price (ICMP)	
COMMON KEY POINTS * use Alt-Enter to start a new line within cell		

Important Step	Key Points	Reasons
A logical segment of the operation when something happens to advance the work.	Anything in the step that might: - Makes or Breaks the job - Fields, Screens, Sections - Makes the work easier to do (knack, tricks, timing)	Reasons for the Key Points
"WHAT we do"	"HOW we do it"	"WHY we do it"
1 Start WTSR evaluation template	1) Transfer request to evaluation template	1) To ensure accurate information for legal / export / quality reasons.
2 Determine the valuation process utilized	1) If lot has PN then use technology/layer to derive cost 2) If no PN then run Brio WTSR valuation query for each lot 3) Complete template with appropriate lot value	1) Utilize standardized costs when applicable. 2) Obtain each lot's tool and glass charges from the query. 3) The correct value must be approved prior to shipping the part. The value also determines the fees charged for the shipment.
3 Set up PN in Boulder export database	1) If lot does not have a PN then skip this step 2) Determine correct export codes based on destination country 3) Send setup request to Boulder team	1) Only PN's are tracked by Boulder. 2) Incorrect export code declaration to customs can cause IBM to pay large fines and even lose its export license. 3) PN shipments will not be approved until the PN's are set up in the Boulder database.
4 Obtain WTSR valuation approval	1) Send standard request form to WTSR finance 2) Track request to ensure completion w/in 24 hours 3) Ensure approval was sent to original CC list	1) WTSR shipment will not be approved unless WTSR finance has approved the valuation before hand. 2) Delays in the approval will cause delays in shipping. 3) Folks on CC list need the information to process the WTSR shipping request.

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Training – Output examples

▼ Example Boulder Setup Request



Subject: Mask PN setup in Boulder DB

Jo and Arlene,

The export codes for the masks are as follows :

PN	HTS	ECCN	CCC/FC
83Y7768	3705900100	3B991.b.2	91V / 4162
83Y7766	3705900100	3B991.b.2	91V / 4162
83Y8138	3705900100	3B991.b.2	91V / 4162
83Y8138	3705900100	3B991.b.2	91V / 4162
83Y8139	3705900100	3B991.b.2	91V / 4162

Can you let me know when the export database is updated so we can move forward with the WTSR?

Thank you for your help.

Training – Output examples

▼ Example Request form to WTSR Finance



Subject: WTSR value approval for Mask House shipment

Hi, Carlos.

The Mask House would like to ship the following items :

Please approve the values and recommend the correct ICMP code for shipping.

Lot Number	Mask PN	Location Initiated	Scrap?	Full Value
<input type="checkbox"/> 000BO	No PN - engineering masks only utilized for engineering work	US	No	\$2,326.97
<input type="checkbox"/> 001BO	No PN - engineering masks only utilized for engineering work	US	No	\$3,151.04
<input type="checkbox"/> 002BO	No PN - engineering masks only utilized for engineering work	US	No	\$2,057.04

Initial World Trade Shipping Valuation Process:



New Process:



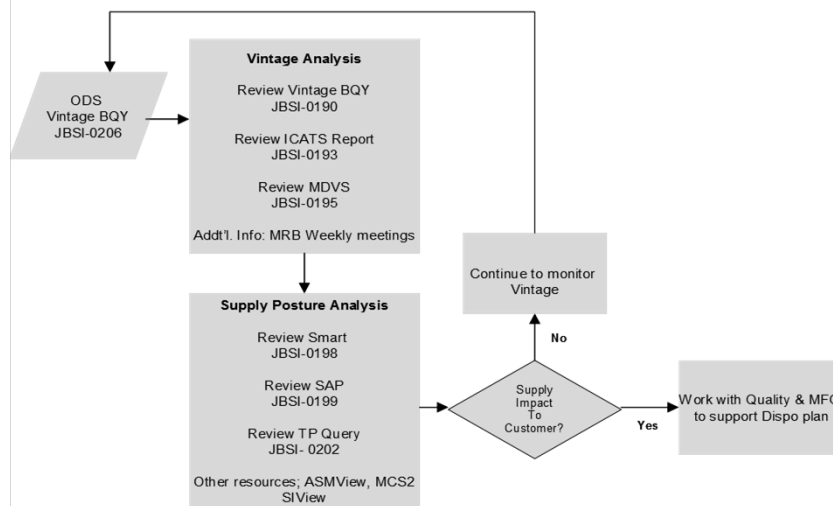
Lessons Learned



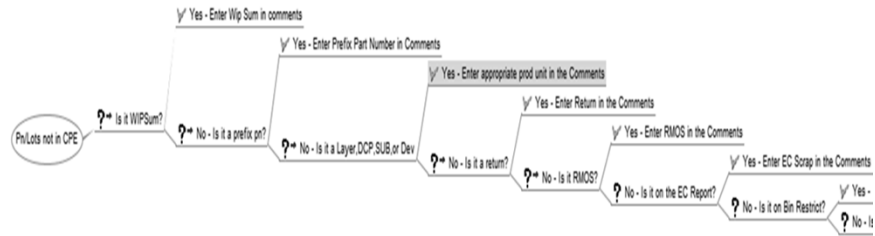
Integrated Supply Chain

Vintage Management Process

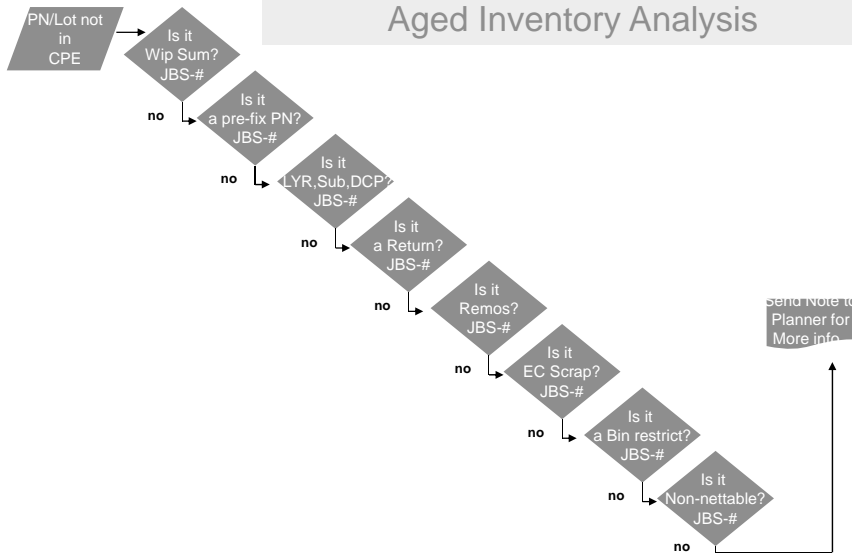
Vintage Management – Supply Analyst



Example: Decision tree



Aged Inventory Analysis





1st Line Manufacturing Managers

Standard Work, Training, and Optimization Initiative



Manufacturing Manager Standard Work

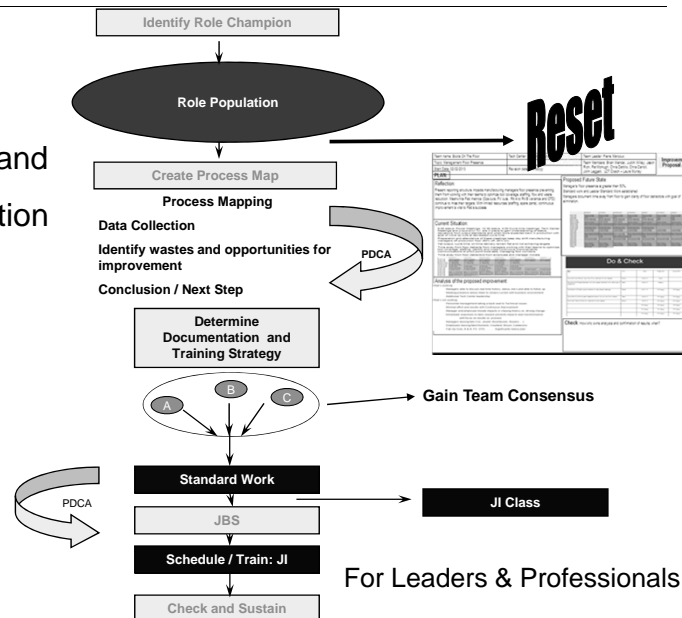
People	Production	Admin	Tech Center	Upline Requests
Separations	Top 15 Charts (11am & 4pm)	Vacation Scheduling/Tracking	Tech Center Meetings - Attend	"Special" Dept Meetings
STDs TD - Return Actions		Work Man's comp		
Recognize - Verbal	Daily Power Meeting	Payroll	Tech Center Meetings - Follow-ups	Visitor Tours
Recognize - Reward	6S Audits	Time Cards - OT / Short term Dis/UPA	Capacity Meetings	Charts - Work-off/Capacity/Utilization
Training	Productivity Improvement - CIP / A3's etc/Scrap/Strategy Deployment	BCG's	White Board Meetings	man's charts updates
Daily Coverage - Staffing Tactical	SAM - Prep	Security Training	Critical Tool Responses	Follow-ups (Floor observations)
	SAM - Meeting	IP's	Engineering Interaction	Capacity and Deployment
People Development	12:30 pm Prep	WST (Work Station Assets)	CIP Process	Man's Responsibilities - Morale
PBC	12:30pm Meeting	Assets	Tech Center Review Meetings	Random(Power outage/Disaster/T outages)
Compensation - Individual	4:30pm Prep	Expense Reports		Customer Requests - Line visits/Metrics etc/Review Procedures &/or Audit
TBDM - LT's and Regs	Ops Pitch Prep (D2)	ITAR		Special Requests to improve production
Mid-Year Reviews	Communicate changes to MFG Teams	Read QMX Updates		1-T's with 2nd lines
Interviews - LT's	Gemba Meetings	About You Updates - Transfer		2nd line coverage
Personnel Issues	Gemba walls	Phone Call!!!!		
Determine R&R's for DEPT	PC Requests - Track down lots, status, reporting follow-on	Emails!!!!		
"Human Factor" - Floor Time	Crossover (D2)	Classes- Contractor		
Coaching & Mentoring	Chasing Hold Lots	Basic Blue Classes		
Discipline - Verbal	Kaizen Events	Computer Set-up		
Discipline - Formal	Lead Interaction	System upgrades		
Discipline - PBC (3)/Improvement Plan	Tech Interaction	Sametime responses		
Retirements (Parties)	EBI Interaction	Credit Card Set-up new manager		
25th Anniversary	Maintenance Interaction	Compute setup new manager		
Training Metrics	6P Auditing	Home Computer Set-up		
Funerals/Wakes/Hospital Visits	Book Clubs			
Baby Stuff	Audits in General			
1-T's	Buddy Checks Check the Checker			
Conflict Resolution	Pilots (Gathering data on CI Items)			
Morale Events - Dept	Battery Checks			
Morale Events - Shift	Engineering Contact (On Weekend)			
Morale Events - Site				
Birthdays/Anniversaries				
Resource Actions				
Promotions				
Breaks and lunch tracking (as needed)				

Manufacturing Standard Work Reflection

- Not enough time to do all required tasks
 - Meeting vs. people and waste focused
- Are all of the current tasks necessary?
- Are they optimal?
- Where should they be done
- No Standardized training
 - Not enough time to train



Standard Work and TWI Job Instruction Process





Current Condition

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
6:00-6:30	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail
6:30-7:00	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting
7:00-7:30	min staffing	min staffing	min staffing	min staffing	min staffing	min staffing	min staffing
7:30-8:00	team staffing	team staffing	team staffing	team staffing	team staffing	team staffing	team staffing
8:00-8:30	TC meeting	TC meeting	TC meeting	TC meeting	TC meeting		
8:30 to 9:00	TC meeting	TC meeting	TC meeting	TC meeting	TC meeting		
9:00 to 9:30	TC Meeting	TC Meeting	TC Meeting	TC Meeting	TC Meeting		
9:30 to 10:00	TC followup	TC followup	TC followup	TC followup	TC followup		
10:00-10:30	Scrap Meeting			LTE weekly			
10:30-11:00	Scrap Meeting			LTE weekly			
11:00-11:30	12:30 prep/check	12:30 prep/check	12:30 prep/check	12:30 prep/check	12:30 prep/check		
11:30-12:00	12:30 prep	12:30 prep	12:30 prep	12:30 prep	12:30 prep		
12:00-12:30	12:30 prep	12:30 prep	12:30 prep	12:30 prep	12:30 prep		
12:30-1:00	12:30 meeting	12:30 meeting	12:30 meeting	12:30 meeting	12:30 meeting		
1:00-1:30	12:30 meeting	12:30 meeting	12:30 meeting	12:30 meeting	12:30 meeting		
1:30-2:00	tool/wip review	tool/wip review	tool/wip review	tool/wip review	tool/wip review	tool/wip review	tool/wip review
2:00-2:30	E-mail/ admin	E-mail/ admin	Furnace TC	Furnace Scrap	E-mail/ admin	E-mail/ admin	E-mail/ admin
2:30-3:00	E-mail/ admin	E-mail/ admin	Furnace TC	Furnace Scrap	E-mail/ admin	E-mail/ admin	E-mail/ admin
3:00-3:30			E-mail/ admin	E-mail/ admin			
3:30-4:00			E-mail/ admin	E-mail/ admin			
4:00-4:30	Misc TC business	Misc TC business	Misc TC business	Misc TC business	Misc TC business	Misc TC business	Misc TC business
4:30-5:00	Misc TC business	Misc TC business	Misc TC business	Misc TC business	Misc TC business	Misc TC business	Misc TC business
5:00-5:30	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review
5:30-6:00	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review
6:00-6:30	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review	06:50 prep/review
6:30-7:00	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting	06:50 meeting
7:00-7:30	Floor	Off-Floor					



Proposed Future State

- Manager's floor presence is greater than 50%,
- Standard work, training and Leader Standard Work established
- Managers document time away from floor to gain clarity of detractors with goal of elimination.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
6:30-7:00	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail
7:00-7:30	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail
7:30-8:00	LSW	LSW	LSW	LSW	LSW	LSW	LSW
8:00-8:30	Power Meeting	Power Meeting	Power Meeting	Power Meeting	Power Meeting	LSW	LSW
8:30 to 9:00	Power Meeting	Power Meeting	Power Meeting	Power Meeting	Power Meeting	LSW	LSW
9:00 to 9:30							
9:30 to 10:00	Status Check	Tech Center	Tech Center	Status Check	Status Check	Status Check	Status Check
10:00-10:30	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action
10:30-11:00	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action
11:00-11:30							
11:30-12:00	12:30 Prep-Floor	12:30 Prep-Floor	12:30 Prep-Floor	12:30 Prep-Floor	12:30 Prep-Floor		
12:00-12:30	12:30 Prep-Floor	12:30 Prep-Floor	12:30 Prep-Floor	12:30 Prep-Floor	12:30 Prep-Floor		
12:30-1:00	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail
1:00-1:30	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail	Lunch & Mail
1:30-2:00							
2:00-2:30	Pace Check/Action	Pace Check/Action	Ron's Lean Mtg	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action
2:30-3:00	Pace Check/Action	Pace Check/Action	Ron's Lean Mtg	Pace Check/Action	Pace Check/Action	Pace Check/Action	Pace Check/Action
3:00-3:30	LSW	LSW	Pace Check/Action	LSW	LSW	Pace Check/Action	Pace Check/Action
3:30-4:00	LSW	LSW	Pace Check/Action	LSW	LSW		
4:00-4:30	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail
4:30-5:00	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail	Personnel & Mail
5:00-5:30							
5:30-6:00							
6:00-6:30	Pace Check	Pace Check	Pace Check	Pace Check	Pace Check	Pace Check	Pace Check
6:30-7:00	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail
7:00-7:30	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail	Status & Mail
TABLE	ON FLOOR	OFF FLOOR					

Boots on Floor Team Feedback

+7
%



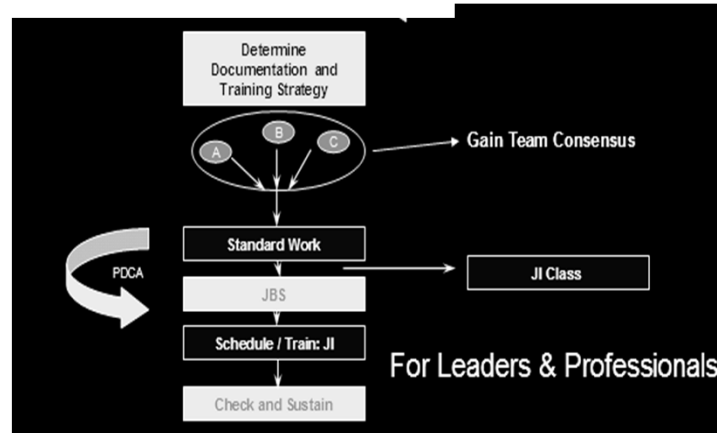
- Incoming managers are crossing over with us on the floor prior to the 18:50 meeting. (MOM)
 - Instead of the offices in 975.
- Being able to see all of our employees throughout the entire department at least once a day during the week days. (Monday thru Friday)
 - Up to three times a shift on the weekend.
- A lead operator mentioned to his manager that his peers are working at efficient pace since "Boots on the floor" was kicked off.
 - Our managerial presence has no predictable pattern.
- Experienced operators are noticing the feed of incoming product being stronger than normal.
- Manager's seeking opportunities at delivering Hot lots for operators. This allows the operators to stay at their tools.
 - Visual behavior that has improved team morale.
- Our presence on the floor is making the operators feel important. In some cases just seeing us on the floor often proves our urgency.
 - Even increases when we're not helping them with an issue.
- A tablet would be lighter alternative than carrying a laptop around the Fab.
- Our presence on the floor is allowing greater opportunity to tackle "House Cleaning" tasks that would normally take a back seat.
- I feel like... I'm adding value.
- I'm able to be there for my team and remove road blocks in real time.
 - Seeing and resolving issues when their small.
- I feel my morale is improving along with the operators.

Manufacturing Manager Standard Work

People	Production	Admin	Tech Center	Upline Requests
Separations	Top 15 Charts (11am & 4pm)	Vacation Scheduling/Tracking	Tech Center Meetings - Attend	"Special" Dept Meetings
STDs To - Return Actions		Work Memo Comp		
Recognize - Verbal	Daily Power Meeting	Payroll	Tech Center Meetings - Follow-ups	Visitor Tours
Recognize - Reward	6S Audits	Time Cards - OT / Short term Dis/UPA	Capacity Meetings	Charts - Work-off/Capacity/Utilization
Training	Productivity Improvement - CIP / A3s & 6S/5S/Strategy Deployment	BCG's	White Board Meetings	man's chart's updates
Daily Coverage - Staffing Tactical	8AM - Prep	Security Training	Critical Tool Responses	Follow-ups (Floor observations)
	9AM - Meeting	IPs	Engineering Interaction	Capacity and Deployment
People Development	12:30 pm Prep	WST (Work Station Assets)	CIP Process	Mgmt. Responsibilities - Morale
PBC	12:30pm Meeting	Assets	Tech Center Review Meetings	Random/Power outage/Disaster/T outages)
Compensation - Individual	4:30pm Prep	Expense Report		Customer Requests - Link visits/Metrics et
TBDM - LT's	Ops Pktn Prep (Pn)			procedures
Mid-Year Re				production
Interviews -				
Personnel				
Determine R&R's for DEPT	status, reporting follow-on	Emails!!!!		
"Human Factor" - Floor Time	Checkover (P2)	Classes- Contractor		
Coaching & Mentoring	Chasing Hold Lots	Basic Blue Classes		
Discipline - Verbal	Kaizen Events	Computer Set-up		
Discipline - Formal	Lead Interaction	System upgrades		
Discipline - PBC (3)/Improvement Plan	Tech Interaction	Sametime responses		
Retirements (Parties)	EBI Interaction	Credit Card Set-up new manager		
25th Anniversary	Maintenance Interaction	Compute setup new manager		
Training Metrics	6S Auditing	Home Computer Set-up		
Funerals/Wakes/Hospital Visits	Book Clubs			
Baby Stuff	Audits in General			
11's	Buddy Checks Check the Checker			
Conflict Resolution	Pilots (Gathering data on CI Items)			
Morale Events - Dept	Battery Checks			
Morale Events - Shift	Engineering Contact (On Weekend)			
Morale Events - Site				
Birthdays/Anniversaries				
Resource Actions				
Promotions				
Breaks and lunch tracking (as needed)				

Next Steps

- Eliminate unnecessary tasks (Boots/Tiered Gemba)



Closing Comments

Standards and TWI JI Implementation for all...

Lessons Learned:

"Mapping Processes and using TWI Job instructions to implement standards eliminates waste, reduces task time, and creates visuals to show a teams strengths and... prioritizes learning in a world where there is never enough time!"

Laura Murray - Lean Transformation Team Member

- Other LEAN tools, (Value Stream Maps and Structured Problem Solving) often always point to enabling standards and focused training for our professionals
- Only implement standards that matter!
- Training by accident is not an acceptable option for professionals, engineers, and our leadership team!

Without Leadership support and understanding the value of standard work and TWI JI, teams will fail!



Q & A



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