



Operational Excellence

Lean Manufacturing/Total Quality Management

Sheridan

- Business
- Culture
- Challenges



Overview

- TQM, Six Sigma, Lean, ISO 9000:
All stand on the shoulders of Deming
 - Everything is a system
 - Systems have variations
 - Blame the system/process not the people
 - Joy of work
 - Intrinsic vs. extrinsic motivations



“If you can't describe what you are doing as a process, you don't know what you're doing”

“It is not enough to do your best; you must know what to do, and then do your best”

“All anyone asks for is a chance to work with pride”

Dr. W. Edwards Deming

Challenges

- **Who are the villains in the TQM process?**
 - Inertia
 - Anecdotes vs. data
 - Fear of the unknown
 - Time consuming process
 - Organizational culture and support from the top
- **Resources**
 - TQM Role

What is Lean?

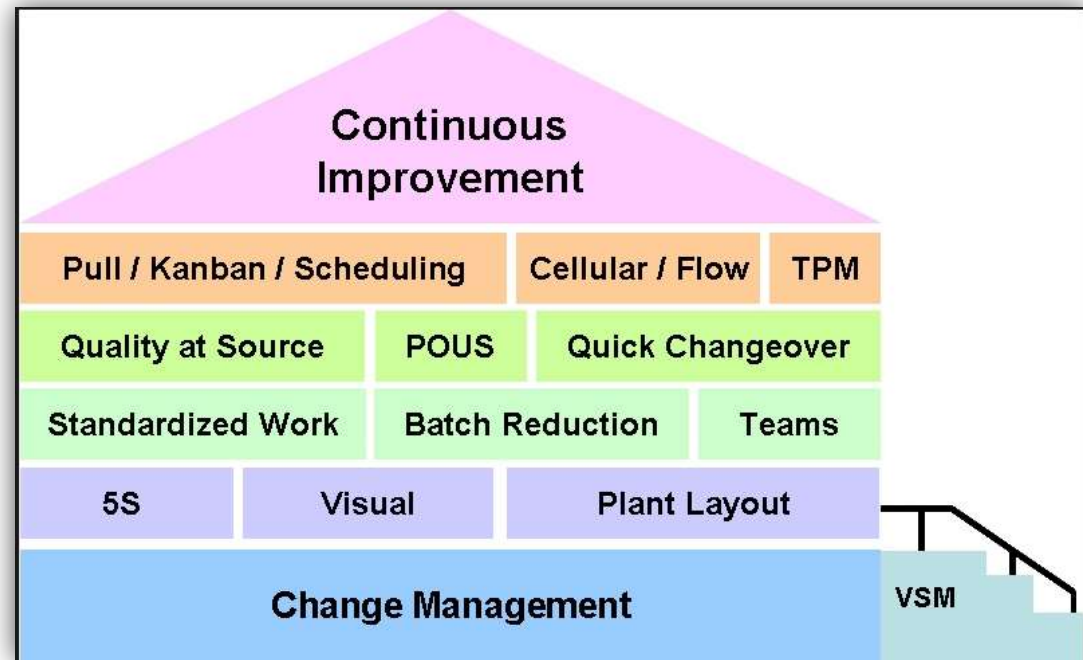
- **A systematic approach to reducing waste**
 - Continuous improvement
 - Improving quality
 - Streamlining processes

- **The goal is not to eliminate jobs but to restore work/life balance**



House of Lean

- VSM – Value Stream Mapping is the stepping stone to identifying where/what is waste; the perfect place to start
- Based on findings, determine which tool should be used next
- Change Management is the foundation – having a clear and supported approach is critical to the success of any of any program
- Sheridan has used many of these to aid in the development of our TQM Program



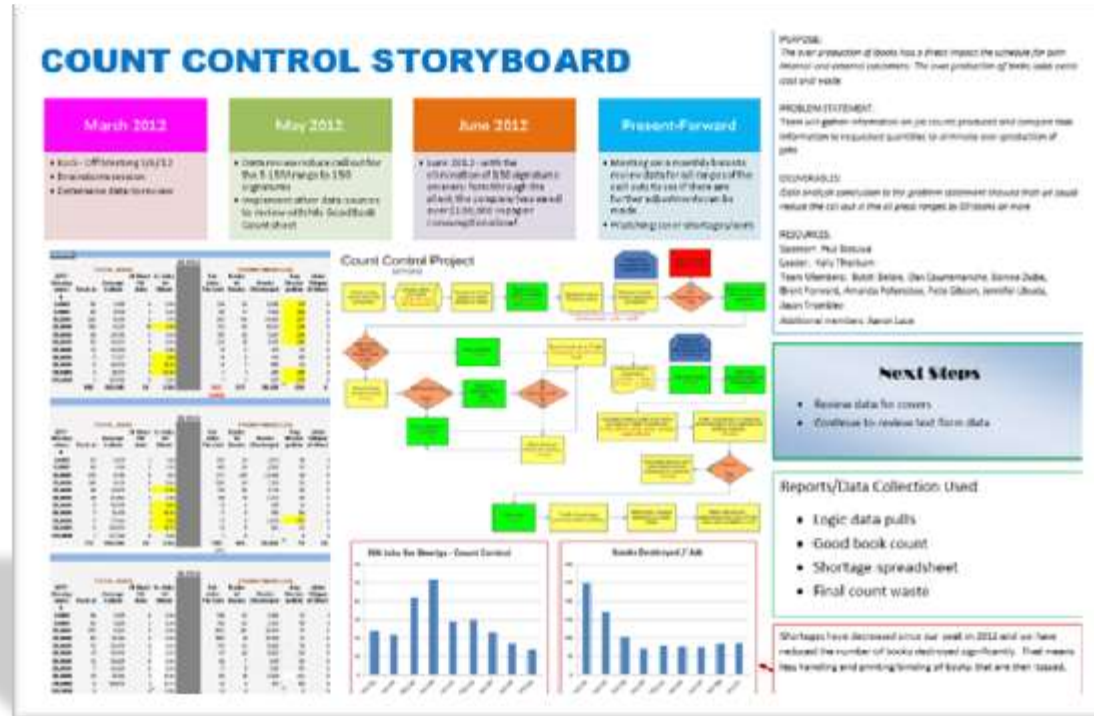
Terminology



- **5S**
 - Sort – Eliminate the clutter
 - Set in Order – Organize and label, set boundaries and limits
 - Shine – Clean (inspection through cleaning)
 - Standardize – Ensure consistencies throughout
 - Sustain – Set plan to ensure system holds
- **PDCA**
 - Plan, Do, Check, Act – steps used to work through process improvement activities
- **Kaizen**
 - To make better through continuous improvement
 - Kaizen events are held for rapid improvement activities

Count Control – Our First Lean/6 Sigma Story

- What is overage and why is it necessary
- Just how much is enough
- Challenging old norms
- Taking risks
- Using data
- Engaging people



GREAT IMPROVEMENTS!



AREA	IMPROVEMENT
General housekeeping and safety	+84% (average)
Distance traveled for set-ups	Reduced by over a mile (5,400 ft) 50% improvement (average)
Usable space	+1,500 sq. ft.
Reduced Inventory	100 sq. ft.
Reduced searching time	11 minutes/instance
Involvement	20 events/137 employees







Books and binders on the top shelf.

Golf Wre
Golf Wre
Golf Wre
Golf Wre
Golf Wre
Golf Wre
Golf Wre

Blue bin containing items.

Blue bin containing items.

Green folder.

Blue bin containing items.

JUNE 25 1971

Mobil

Label on tan jug:
Labeled
Back Garden
Water
Bottle
Hanging

Grey jug.

Yellow spray bottle.





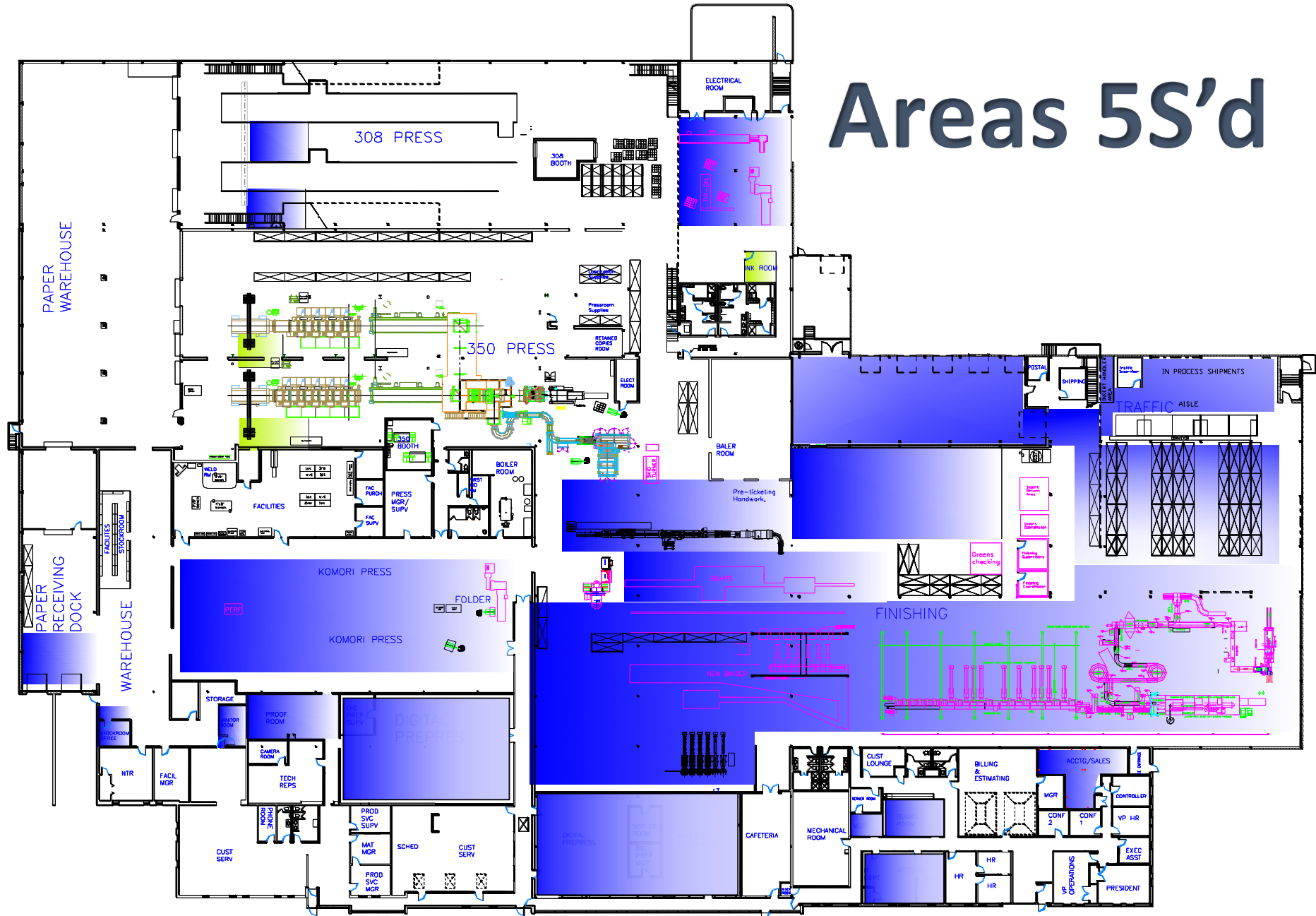








Areas 5S'd





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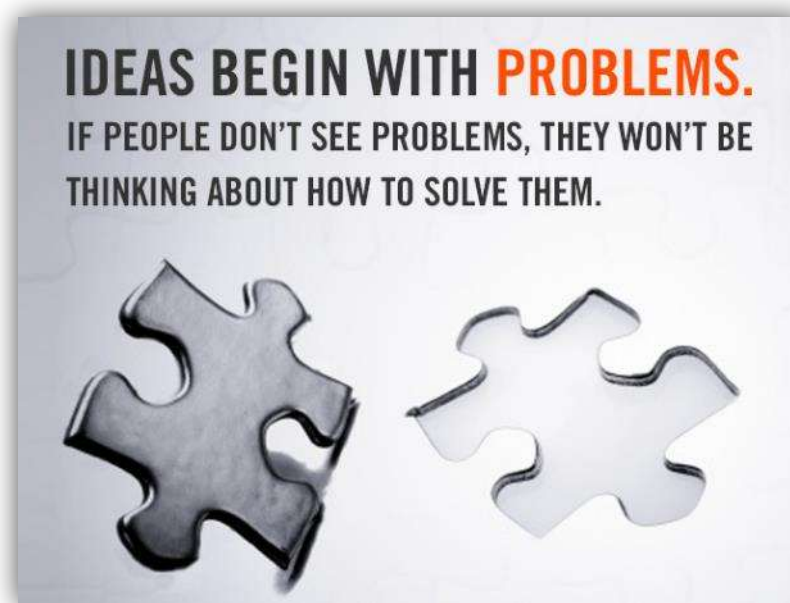
Sheridan's Projects

- Reducing turnover
- Improve training
- Reducing recruitment/onboarding time



Where to start?

- Project Charter
- Value Stream Mapping Event



Project Charter

- Providing clear direction for an effort with targets is critical to identifying if the changes made result in improvement as well as keeping the project focused.

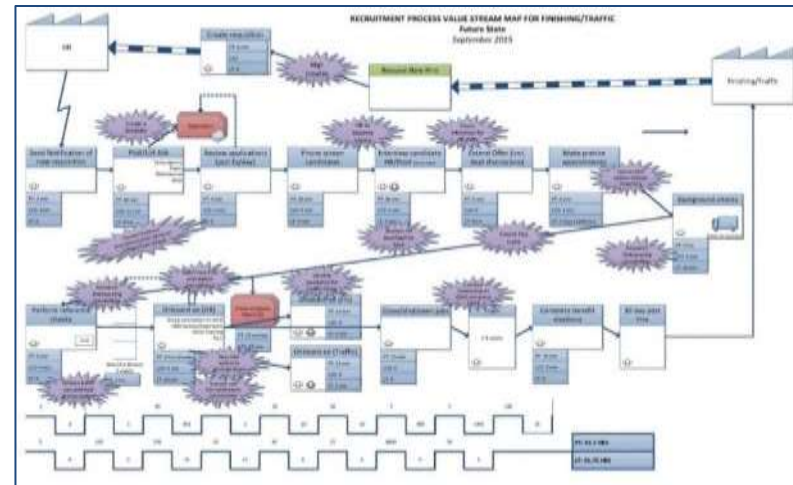
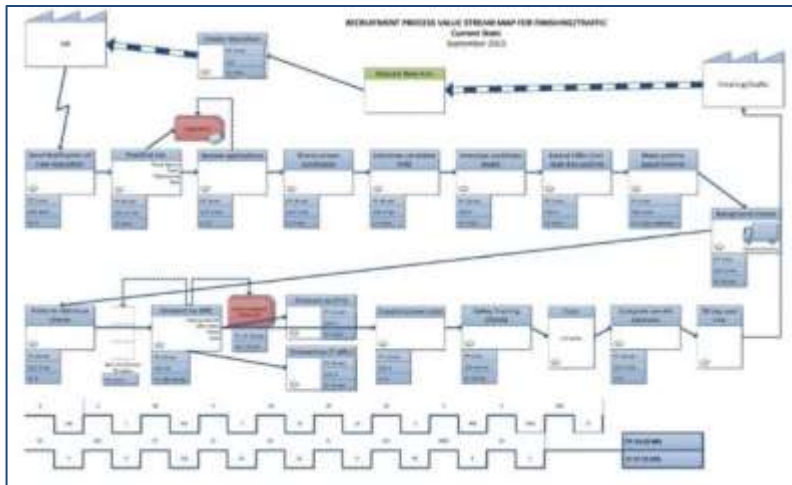
<p>Business Case</p> <p>The lack of full staffing in finishing is resulting in production inefficiencies and high OT with no end in site. As a result, we need to improve recruiting efforts and reduce turnover. We are not currently getting a good selection of qualified candidates, both in number of applicants and quality. On the flip side, we are also struggling with high turnover within the department. Both items result in significant cost in both lack of productivity, training time and administrative time.</p>	<p>Goal Statement/Target/Impact</p> <p>Pool of quality applicants increased by 10% ✓ Full staffing in Finishing by end of year ✓✓ Reduce turnover by 10% ✓ # of new hires that stay 30 days, 60 days, 90 days, 1yr Increase referral bonuses given by 2% by end of year ✓</p> <p>All targets should be improved by the end of the year.</p>
<p>Opportunity/Problem Statement</p> <p>This team will identify why we are not consistently receiving good candidates and look at new potential sources.</p> <p>The team will also look at turnover to determine why employees are leaving and at what point in their employment. Trends will be highlighted and we will focus on improvement opportunities to reduce the current level of turnover while improving retention.</p>	<p>Project Scope</p> <p>This project will focus on the Finishing department, but the findings will likely prove helpful across all departments.</p>

40% reduction



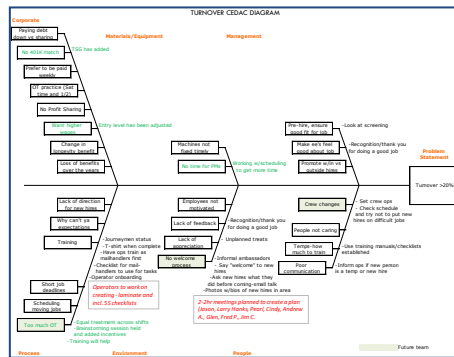
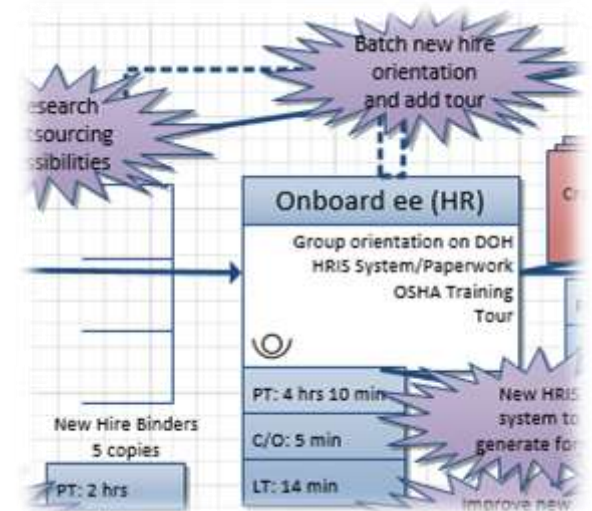
What is Value Stream Mapping (VSM)

- Method for analyzing the current state and designing a future state for the series of events that take a product or service from its beginning through to the customer.



Determine next steps

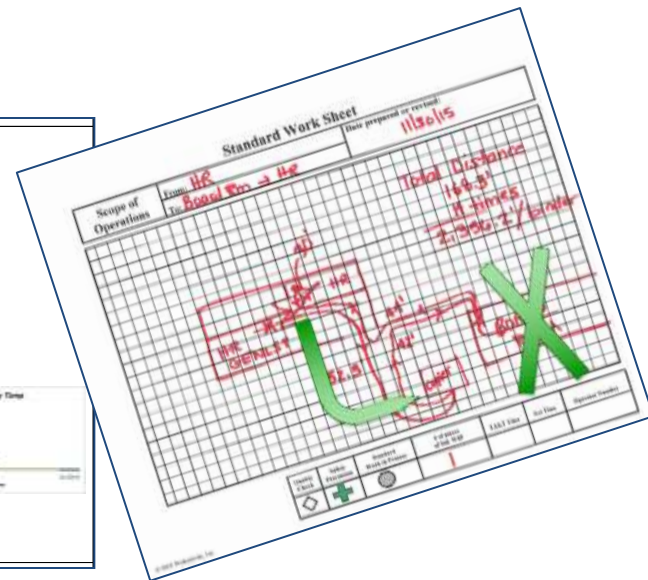
- Identify area to focus on first
- Determine best approach to complete
 - What tools to use?
 - Who to involve?
 - What is the end goal?
- Assemble team



Data:

Changeover Study - Observation Sheet for Creating a New Hire Binder

Sequence Number	Changeover Step	Step Time (min)	Time (min)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	Total Time
1	Get binders (5)	40	40																														
2	Get binders/inserts for binder	15	15																														
3	Place files in binder	75	75																														
4	Remove binder and put into	40	40																														
5	Check the binder for	75	75																														
6	Check the binder for	40	40																														
7	Check the binder for	100	100																														
8	Check binder and put into	100	100																														
9	Check binder and put into	100	100																														
10	Check binder and put into	100	100																														
11	Check binder and put into	100	100																														
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25	Check binder and put into	100	100																														
26	Check binder and put into	100	100																														
27	Check binder and put into	100	100																														
28	Check binder and put into	100	100																														
29	Put binder into binder (5)	40	40																														
TOTAL TIME			1000																														



Recruitment Project



- Flow analysis done for new hire binder process

48 min/binder

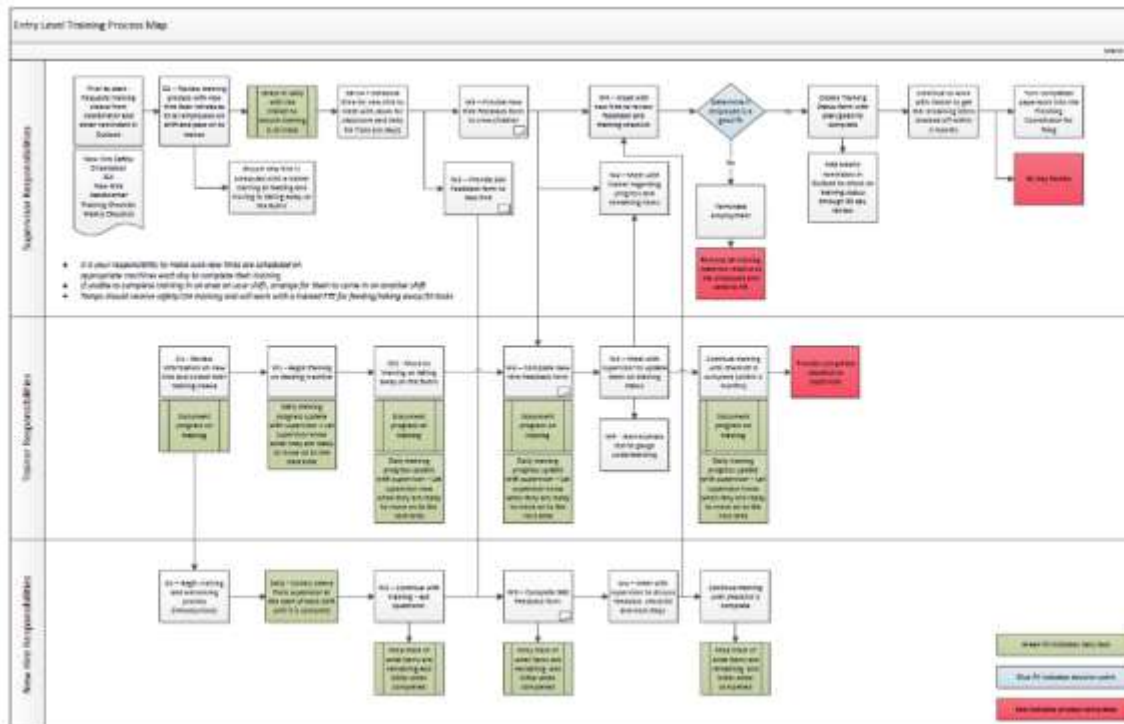
- Created new process for orientation

3 hours/new hire

Recruitment Project



- Created a training process flow for supervisors to follow for new employees. This ensures everyone is following the same process and is aware of the expectations.



Beyond the projects

- Employees feel empowered to present ideas for change, even if radical
- Confidence that when ideas are presented, follow up will take place, even if not accepted
- Out of the box thinking, employees challenged to look at things differently based on exposure to tools
- Training becomes a priority
- Continuous improvement becomes an integral part of the culture

In summary

- Document your story and celebrate your successes!
- Encourage continuous improvement



Thank You! Questions?

Paul Bozuwa and Kelly Thorburn

