

# Providing Excellence in Customer Experience through Service Operations

**Butch Yellott**  
Director – Operational Excellence  
**Alcon**





# We operate in 74 and serve patients in over 140 countries



## Headquarters

- **Fort Worth, TX, US:** Global, Americas
- **Switzerland:** Europe, Middle East and Africa
- **Singapore:** Asia & Russia
- **Japan**



## Vision Care R&D and Manufacturing

- **US:** Georgia and Texas
- **Europe:** Germany
- **Asia:** Singapore, Malaysia, Indonesia



## Surgical R&D and Manufacturing

- **US:** California, Texas, Pennsylvania, West Virginia
- **Europe:** Switzerland, Germany, Ireland, Belgium
- **Israel**



# Why We Exist



20 million are blind  
from **cataracts**



1.7 billion have  
**presbyopia**



153 million have  
uncorrected  
**refractive errors**



93 million have  
**diabetic retinopathy**



67 million live  
with **glaucoma**



# Leading on the Edge – Key takeaways

- Building on Lean successes
- Expanding Lean
  - Warehouse Operations
  - Repair Shop Operations
- Engagement of Cross functional teams
- Results that improve Customer Experience
- Cost savings





# Alcon's Lean Journey



## Grass roots start

Case studies

Networking – internal and external

## Corporate Global Operational Excellence Group launched

Training:

11 Master BBs, 145 BBs, and 1412 GBs

Major Events:

2012 – 2 Gemba events

2014 – 2 Gemba events

2015 – 14 Gemba Events

2017 – 29 Gemba Events

2018 – 39 Gemba Events

2019 – 41 Gemba Events

Culture:

100's of Kaizen Events annually

## People impacted

8,500+ Alcon Associates engaged

Several 100 Million customers/patients served by the highest

Quality products in Eye Care!





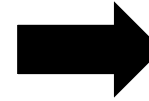
# Pre-Lean Production





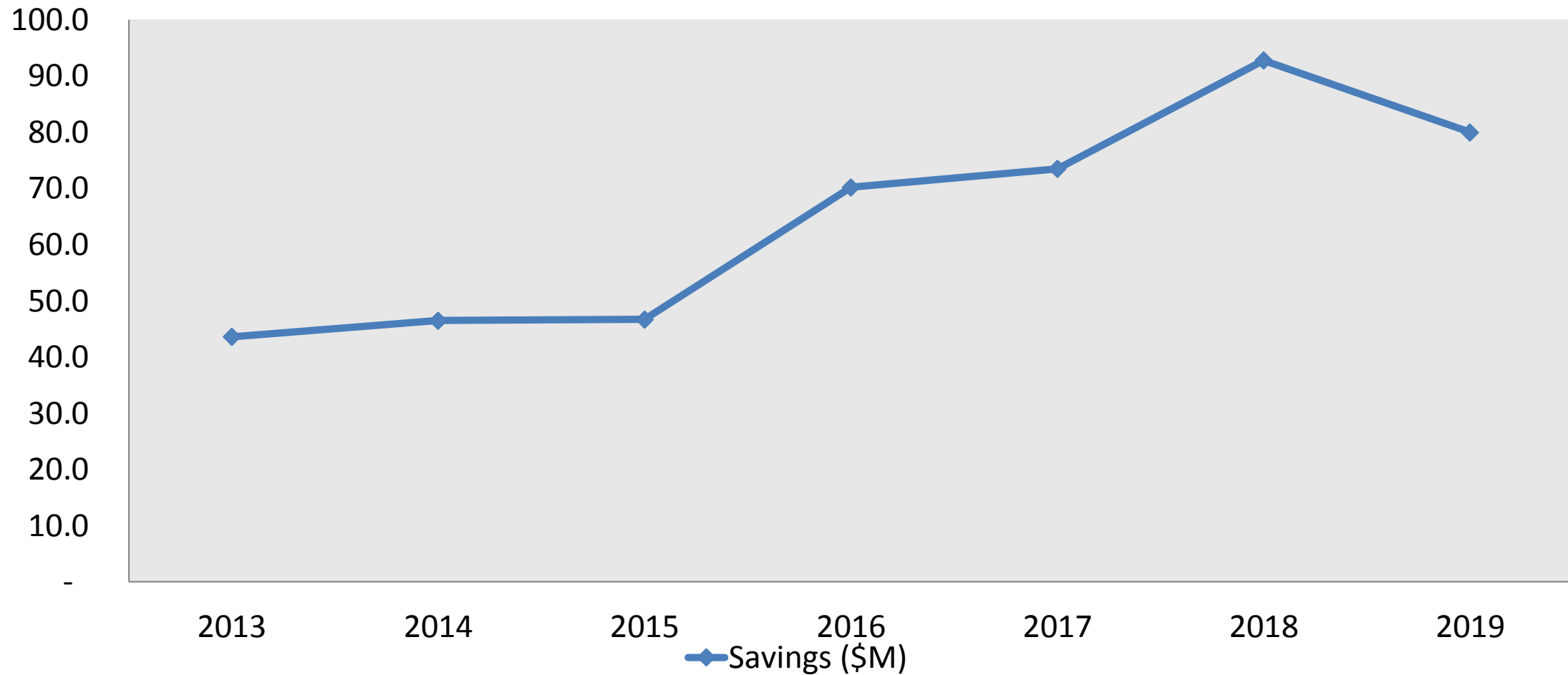
# Post-Lean Production

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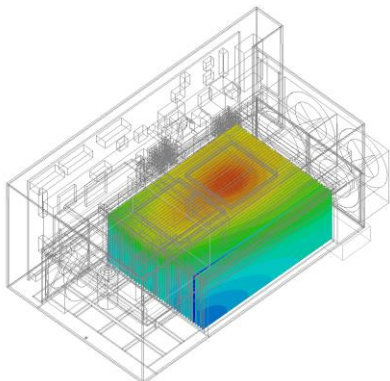


# Financial Results – Over \$450M





# Not just for Manufacturing anymore!



R&D





# Global Technical Services

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- Service/Operators Manuals
- Service Procedures



- Refurbish Spare Parts
- Reprocess Alcon Systems
- Govern Global Repair Centers



- Product Training
- Training Documentation
- Technical Support



- Spare Parts Supply Chain (LF)



- Global Systems Support
- Calibrated Tool Governance



- Technical Service Engineering
- Feedback into Product Design



# Services Provided



## Customer Facing

- Product Installations
- Product Preventive Maintenance
- Product Repair
- Service Test Procedures
- Retrofits / Upgrades
- Customer Training
- Surgery Standby
- Sales Support
- Trade Shows
- Service Contract and Time/Material Sales

## Not Visible to Customer

- Product Technical Training
- Technical/Customer Support
- Spare Parts Logistics
- Repair Shop
- Used Equipment Reprocessing
- Resource Management
- Calibrated Equipment Management
- Service Manual / Ops Manual
- Documentation Release/Management
- Engineering Support
- External Quality/Regulatory Support
- Product Quality Monitoring



# Global Support

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# Service Warehouse Challenges

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EXPECT  
DELAYS

Backorders

VS.

Fill Rate



Low  
Staff  
Morale





# Before State Valencia Warehouse

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- **Batching**
  - Material
  - Processes
- **Emails** to ensure things get done
  - Not trusting the system
- **System Work A rounds**
  - Incorrect access or lack of knowledge
- **Inventory** staged everywhere
- **Exceptions** put to the side
  - Pallets of “pending issues”
- **Inventory** not matching system
  - Self selected cycle counts and missing items still showing in location in system





# Cross Functional Kaizen Team



Materials

Quality

Warehouse

Logistics

Planning

Supply Chain

Buying

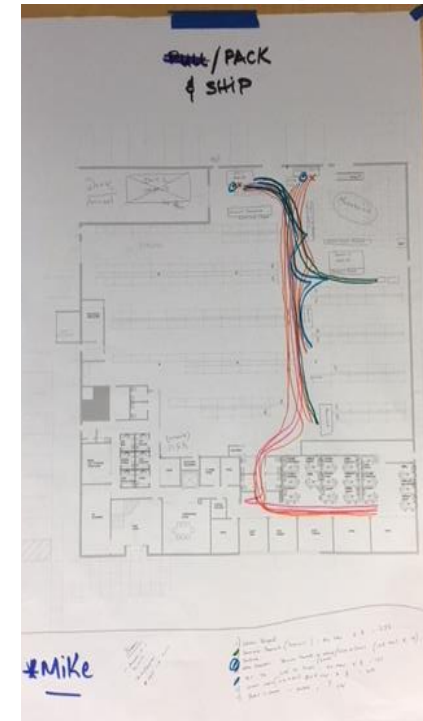
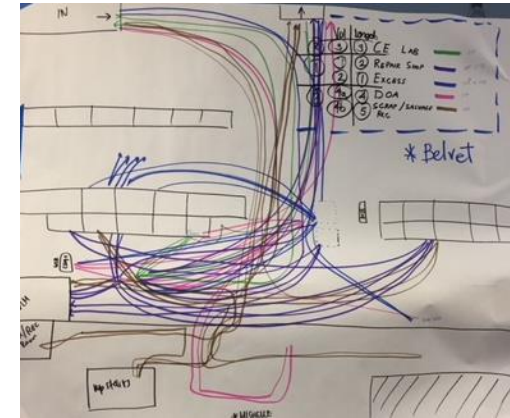
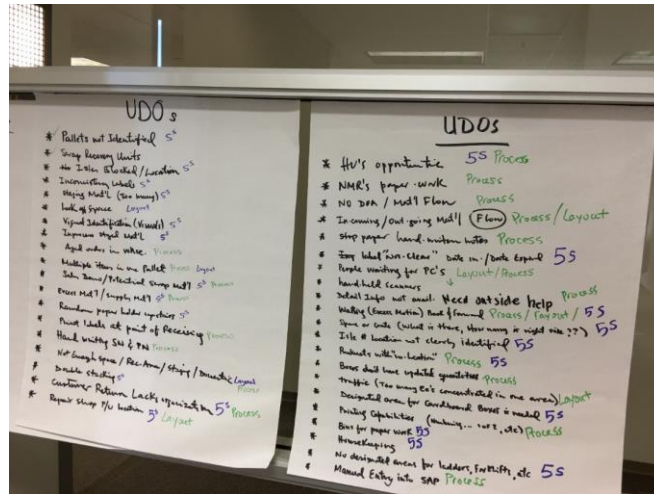


OpEx

Compliance



# Lean Tools





# Activity Analysis



Observe work

TRAVEL DISTANCE	BEFORE	AFTER	% CHANGE
Receiving	160	82	48.75%
Put away	80	43	46.25%
Picking	32	15	53.125%
Shipping	30	10	66.667%
Return to stock	10	2	80%
Return to cart	10	2	80%
Return to office	10	2	80%
Return to warehouse	10	2	80%
Return to shipping	10	2	80%
Return to receiving	10	2	80%

Receiving / Put away

TRAVEL DISTANCE	BEFORE	AFTER	% CHANGE
Rec Good	100	50	50%
Rec Non Good	100	50	50%
Pulling	100	50	50%
SHIP DOM	100	50	50%
SHIP INTL	100	50	50%

TRAVEL DISTANCE	BEFORE	AFTER	% CHANGE
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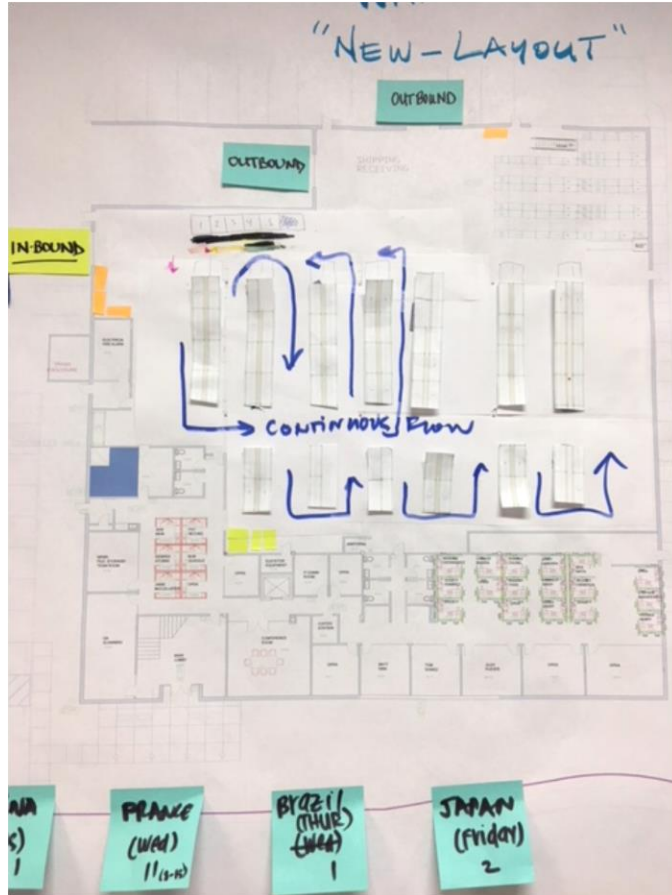
# Wastes

- **Defects**
  - Wrong items received, shipped
  - SN manually entered incorrectly
- **Overproduction**
  - Large batches; more material than demand
- **Transportation** (excess movement of product, documentation, material)
  - Handwritten post its
  - Lack of available space for put away
- **Waiting**
  - Issues, lack of access (Returns)
- **Over-processing**
  - Printing extra copies of packing list to file
- **Motion**
  - See Spaghetti Diagram





# Future State Design





# Execution

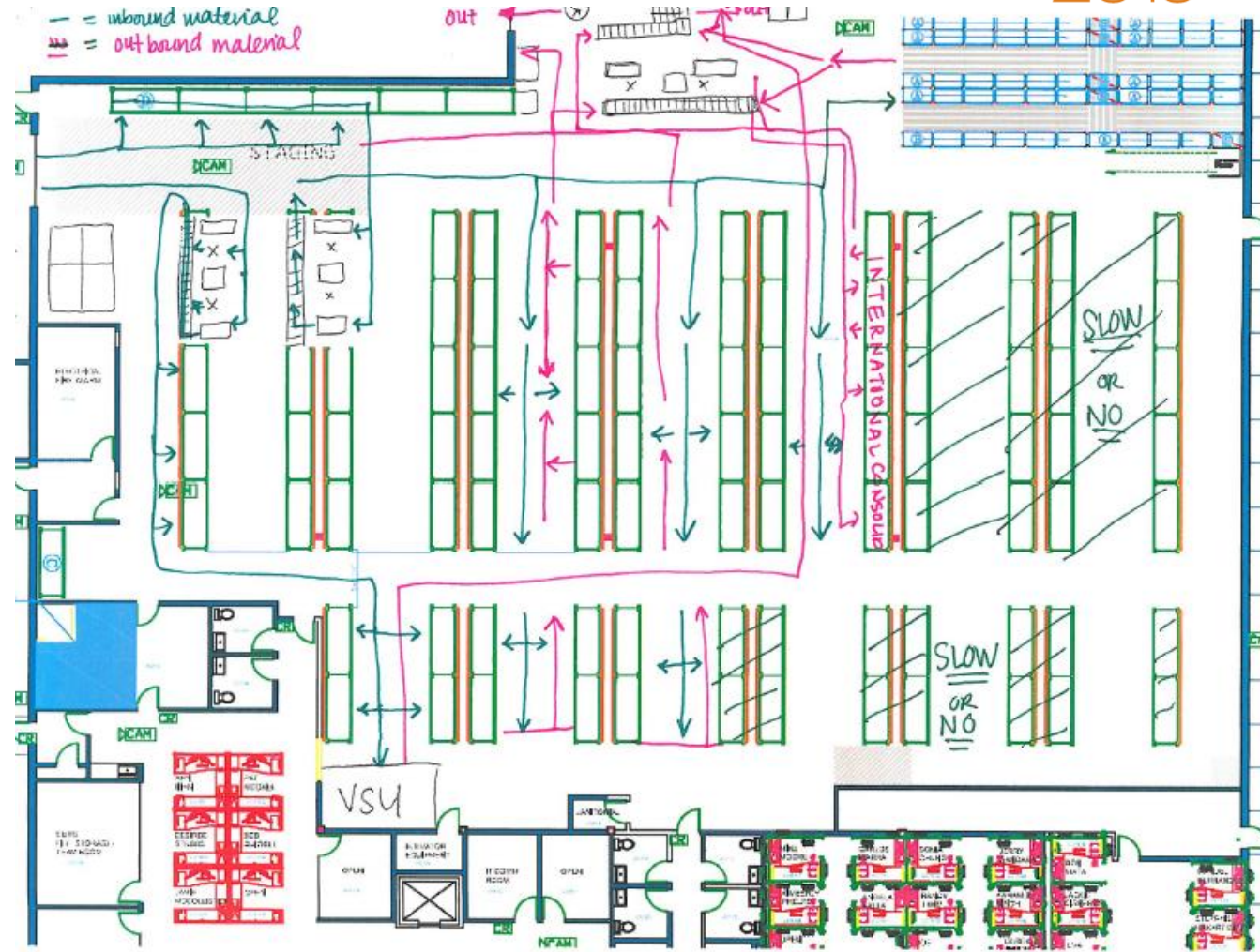
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# Improved Material Flow

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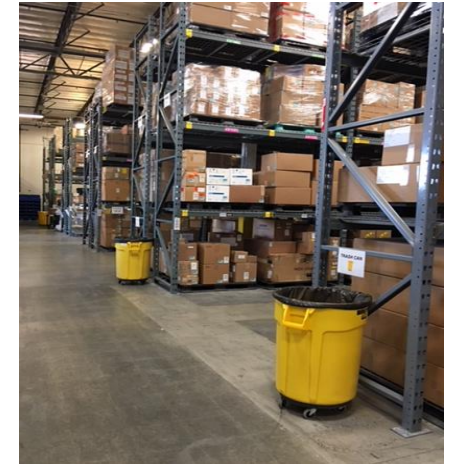
# Results





# Results

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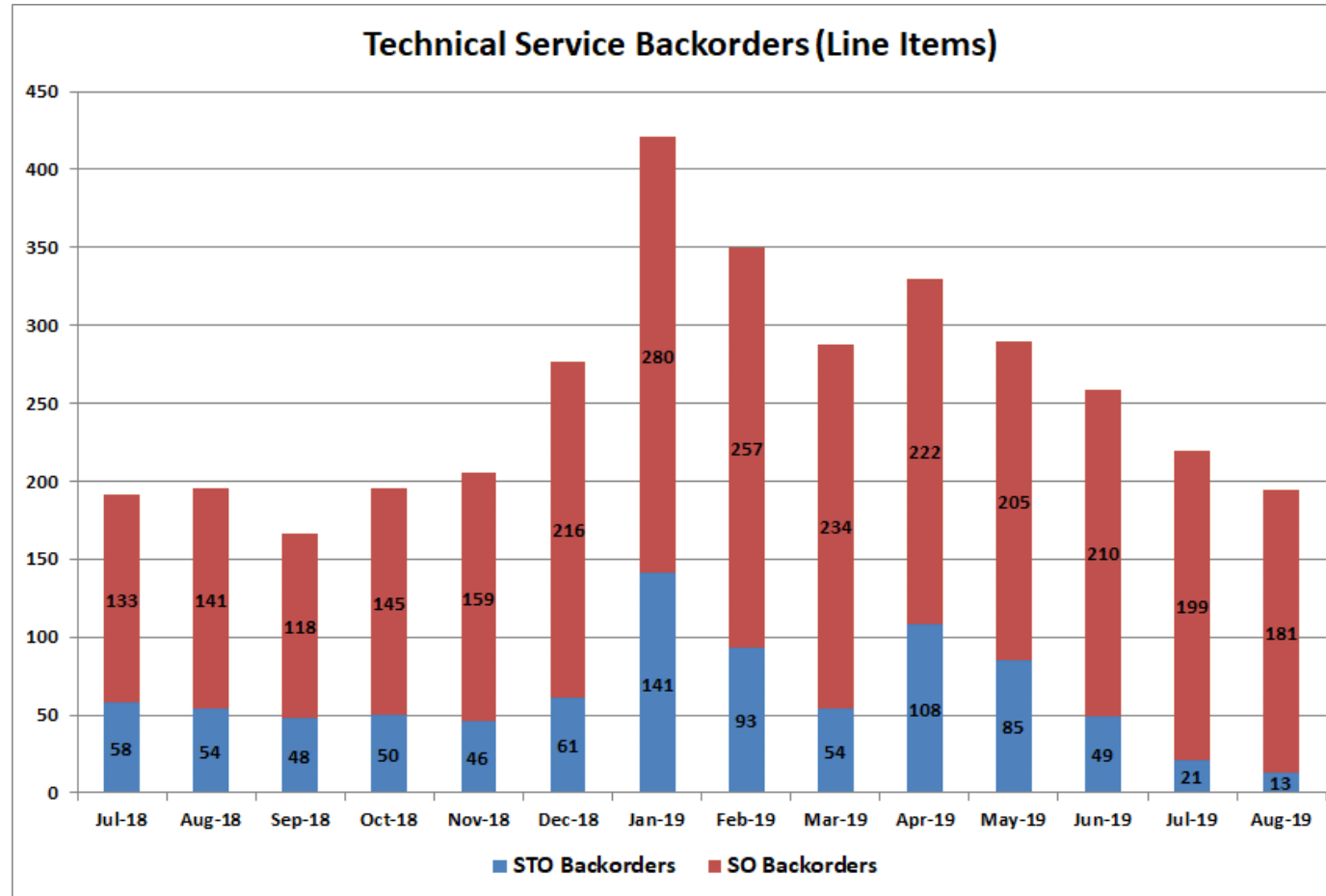
# Metrics



Valencia Re-Layout Improvements	October 2017	Jan-2018	Improvements
Handling Units	22,367	17,151	-23%
Average Labor Hours (weekly; not project)	680	580	-15%
Average Overtime Hours (weekly; not project)	220	20	-91%
Average Total Hours	900	600	-33%
Average Overtime Pay Weekly	\$ 6,875	\$ 625	-91%
Average Weekly Pay (estimated)	\$ 23,875	\$ 15,125	-37%
Annualized Pay (estimate because mix of FT and Temp)	\$ 1,241,500	\$ 786,500	-37%
Blocked Inventory Dollars (Not relating to MRB)	\$ 2,432,527	\$ 1,167,975	-52%
Key Floor/Working Space (square feet)	21,376	10,134	-53%
Pallet Storage Locations for Full Value Inventory	1,440	696	-52%



# Metrics





# Repair Shop

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# Spare Part Refurbishment



- Increase global availability of replacement parts
- Extend the life of products in the field
- Lower cost of repair



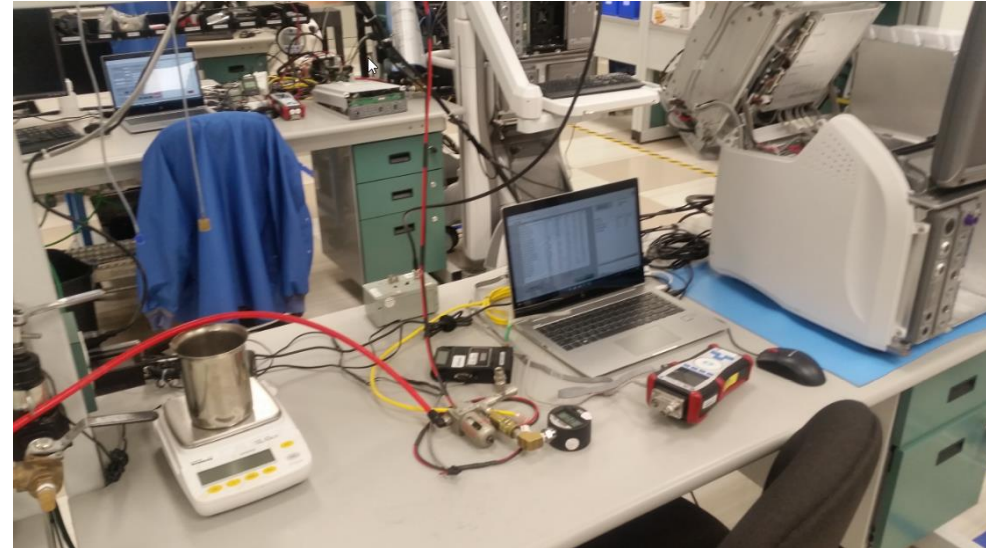
# Component Repair





# Current State Job Shop

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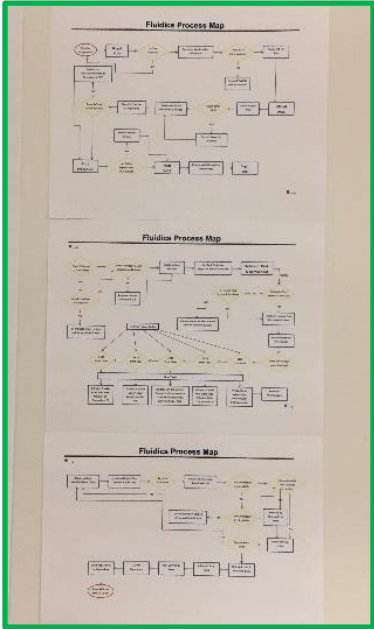




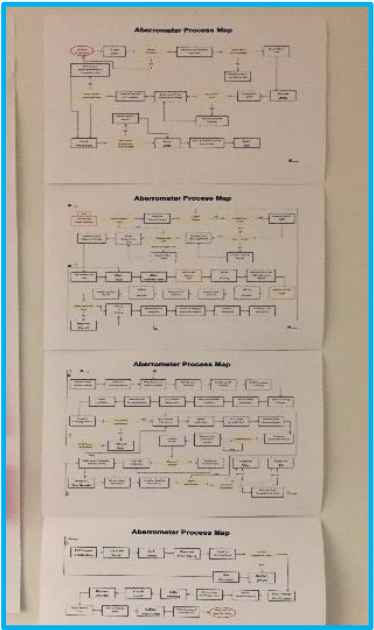
# Value Stream and PMAPS



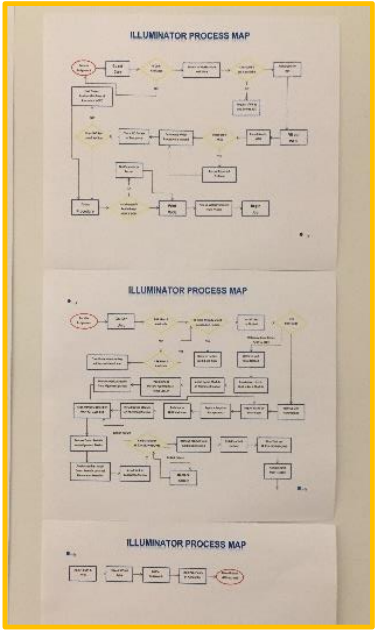
FLUIDICS



WAVETEC

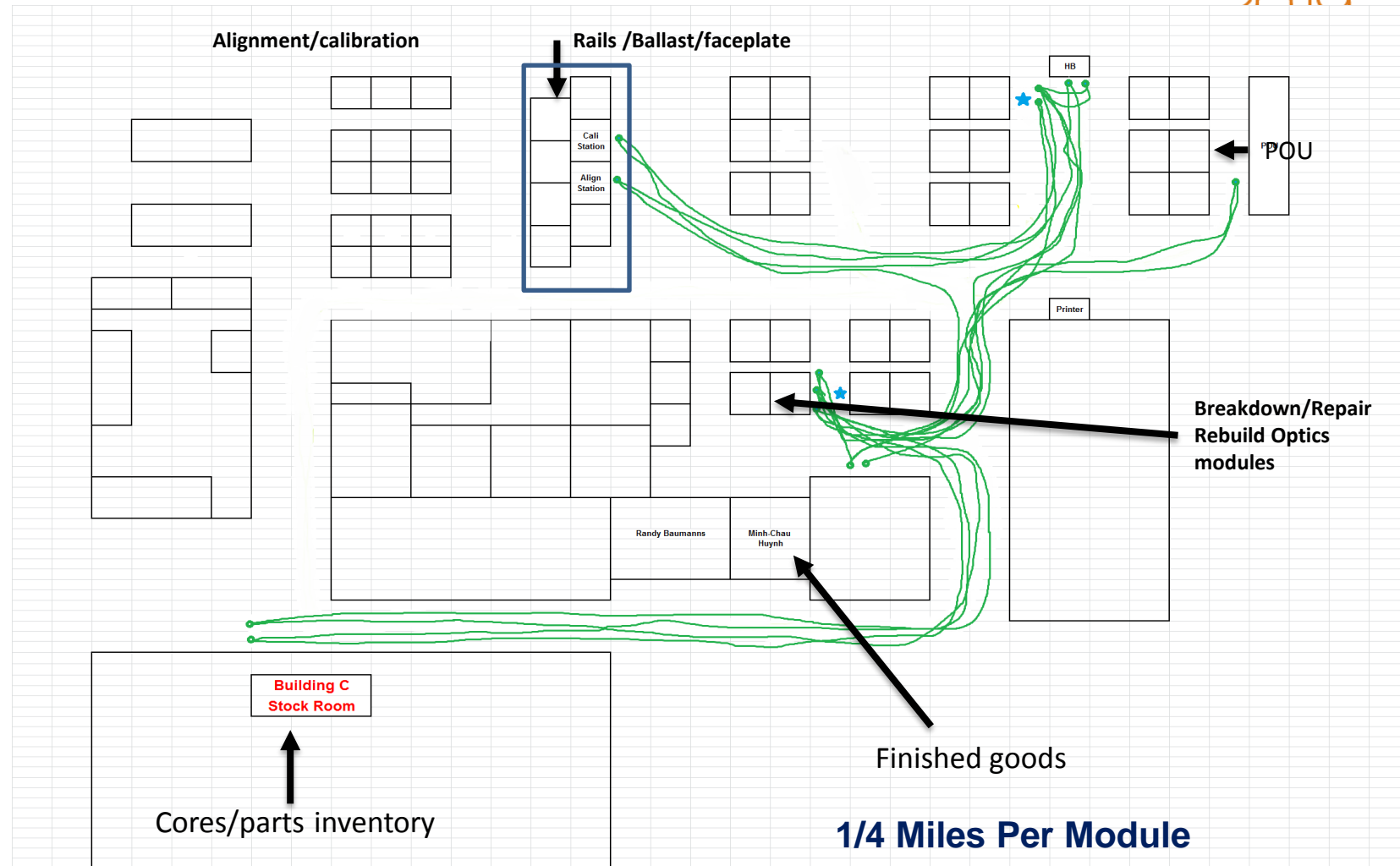


ILLUMINATOR



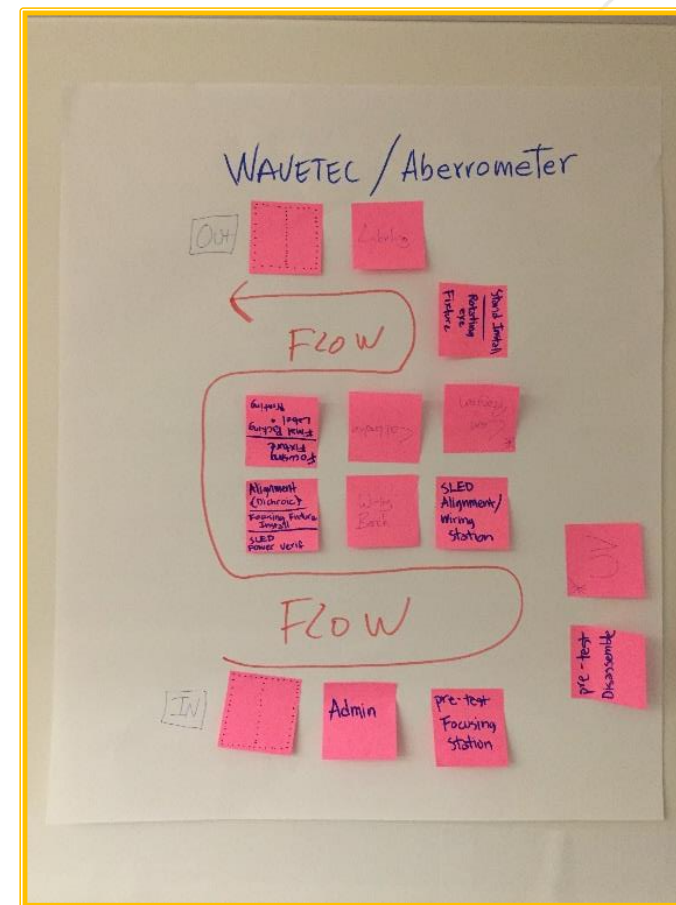
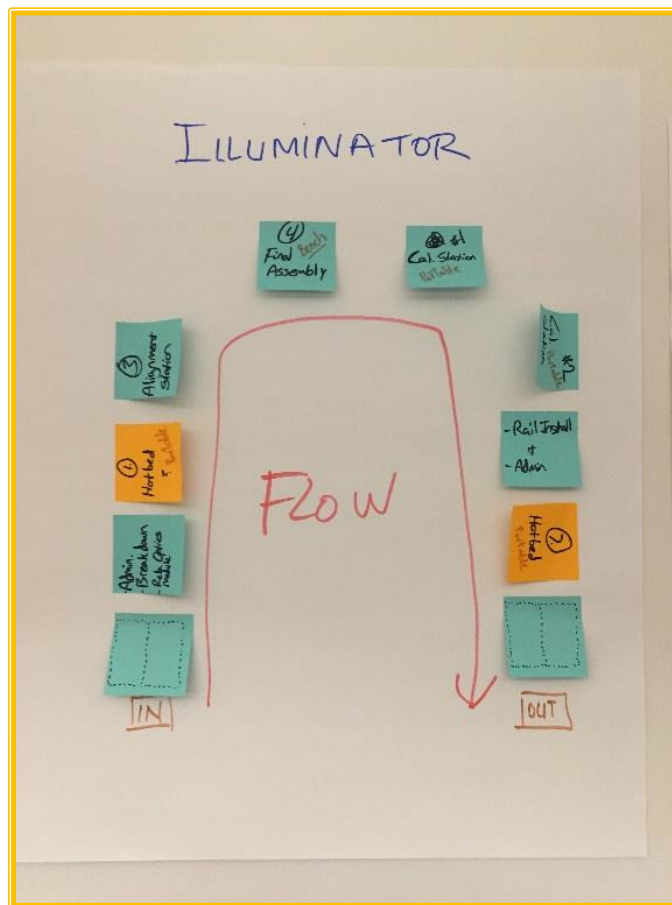
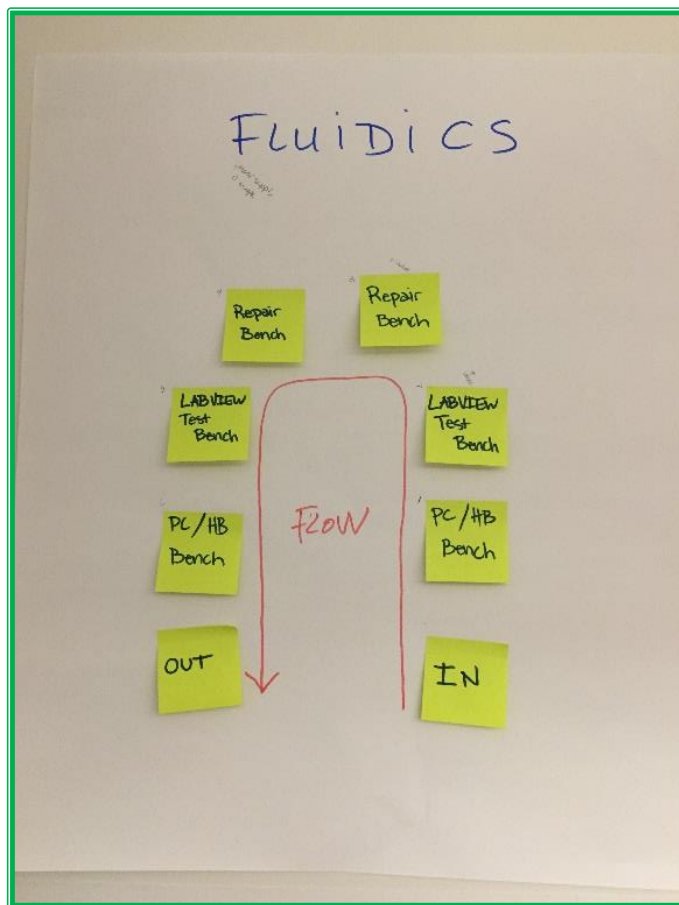


# Lean Tools





# Cells by Product Families





# Cellular Layout

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# 5S Transformation

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# Visual Controls

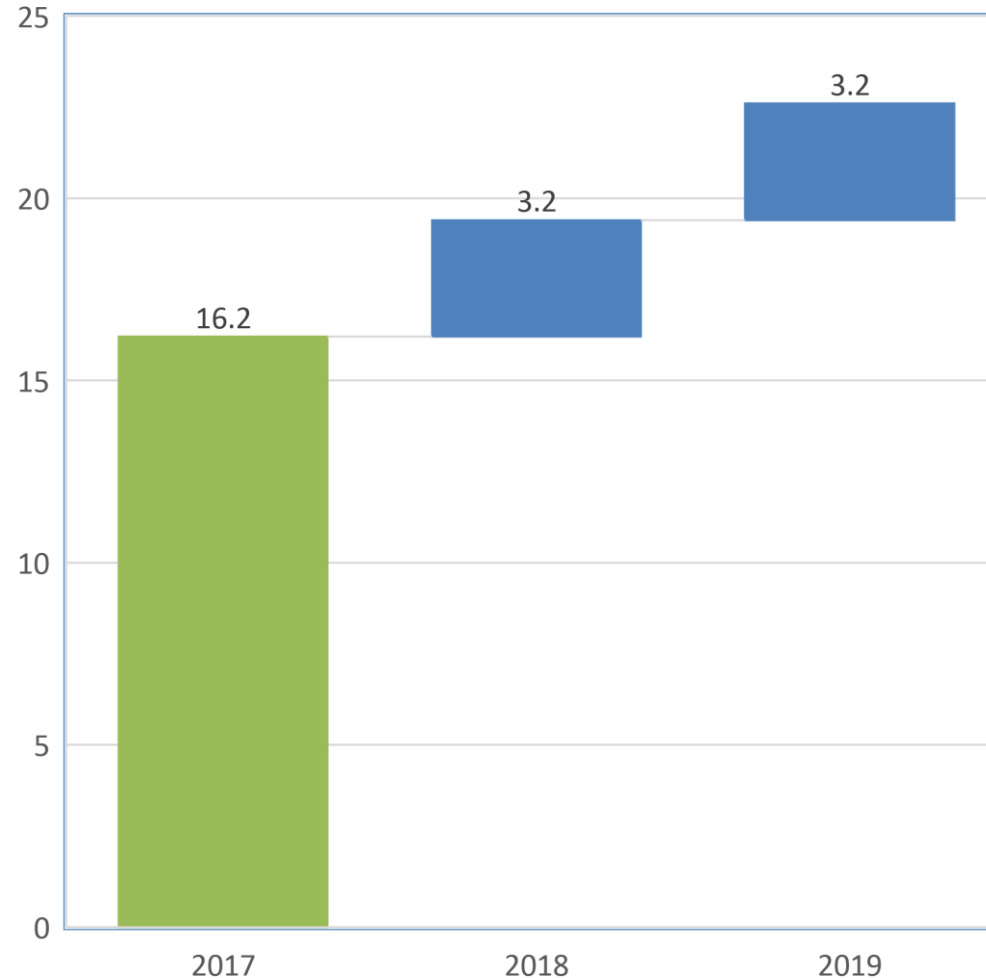


2 bin systems prevent shortages of CORES or components.



# Savings

- 2017: \$16.2M Cost Savings
- 2018: \$19.4M (+\$3.2M)
- 2019: \$22.6M (+\$3.2M)
- **\$58.2M Total Savings**





# Thank You!

***Your opinion is important to us!***

**Please take a moment to complete the survey using the  
conference mobile app.**

**Session No: ThS/39**  
**Providing Excellence in Customer Experience through**  
**Service Operations**

**Alcon**

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