A Journey Into Lean Steve Brenneman, CEO/Founder of ATC Trailers

What is Lean?

Lean Tools-5S, Takt time, Kaizen, SMED, A3, JIT, KANBAN

Using the scientific method to continuously improve the business and other related parts of the entire value stream.

A complete change in the way that we work as human beings

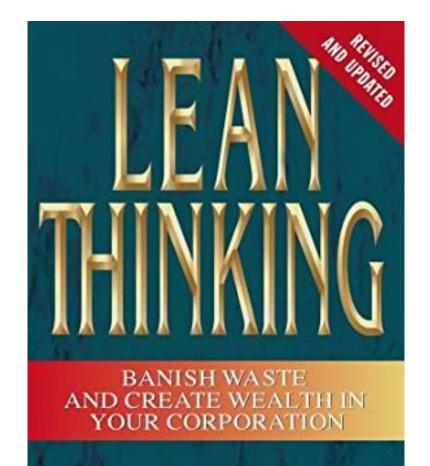
- From individual heroes to strong teams
- From computer driven systems to simple, physical ones
- From complex systems understood by experts to simple systems that give power to the workers
- From job=work to job=work + improving the work (kaizen)



Nappanee Window



Extrusion Mill



James P. Womack and Daniel T. Jones

Authors of The Machine That Changed the World

Turning Point for Me

Turning Point

- Lost 40m/yr business in the downturn
- Sold off assets and saw all of our mistakes
- only dabbled with lean
- Saw many of the same issues at Alum Trailer but now saw thru lean eyes

Company Overview



- Founded 1999
- Purchasing in Cargo Trailer Co.
- Elkhart County- Trailer Capital
 - RVs
 - Cargo Trailers

Products









Reason for Action – Phase 1

- 60% Drop in Sales from '07-'09
- Relied heavily on tribal knowledge
- Average Vendor paid
 25 days late
- Negative equity
- 5 inventory turns





Separated into 3 lines based on work content and complexity

Line 1 (Raven)

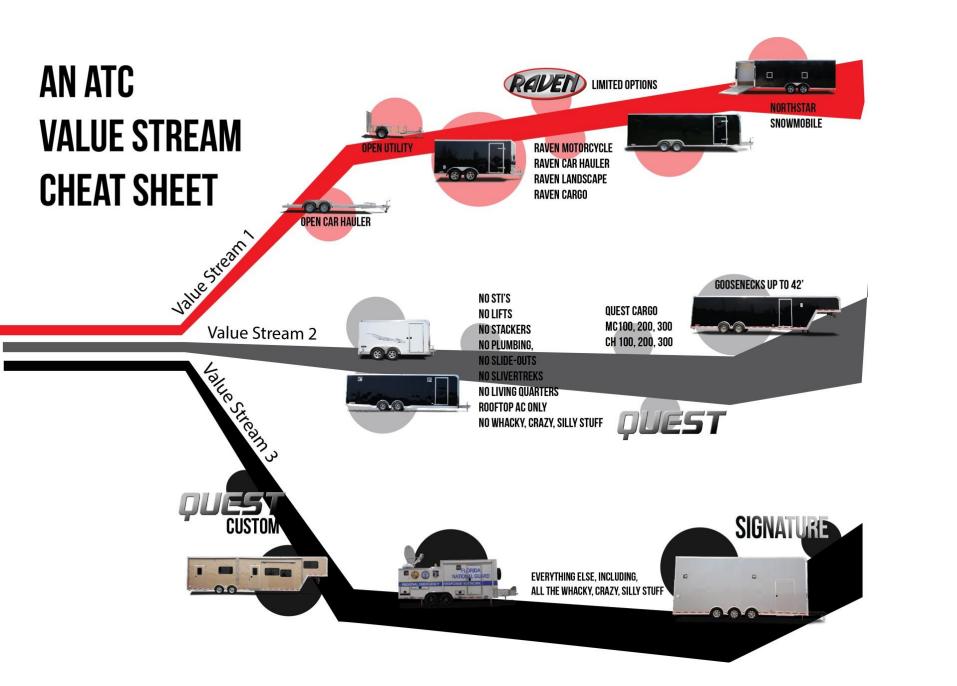


Line 2 (Midline)

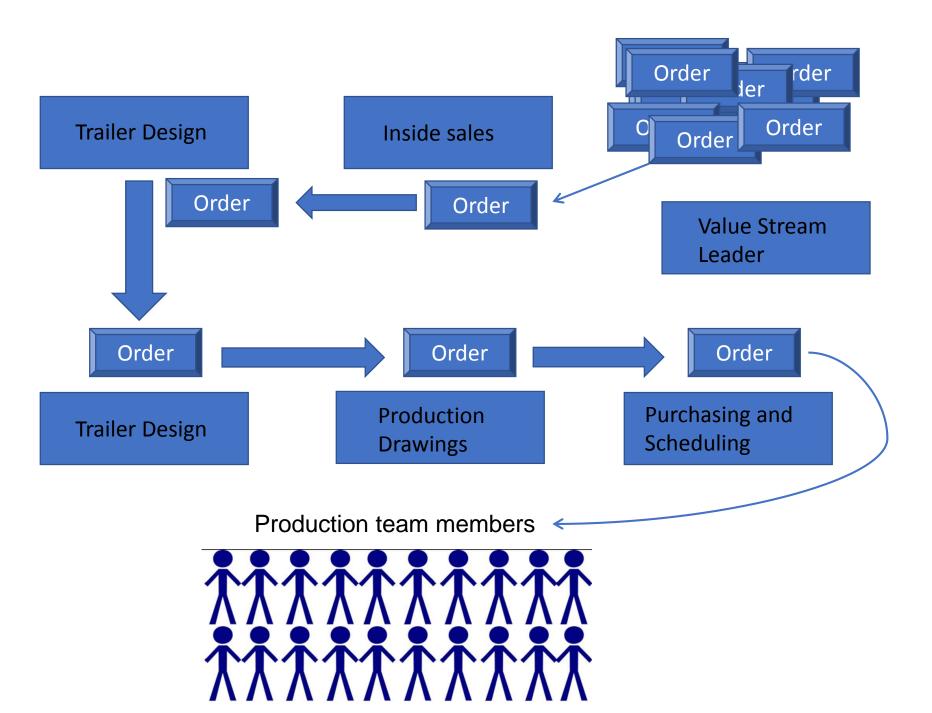


Line 3 (Custom/Large)

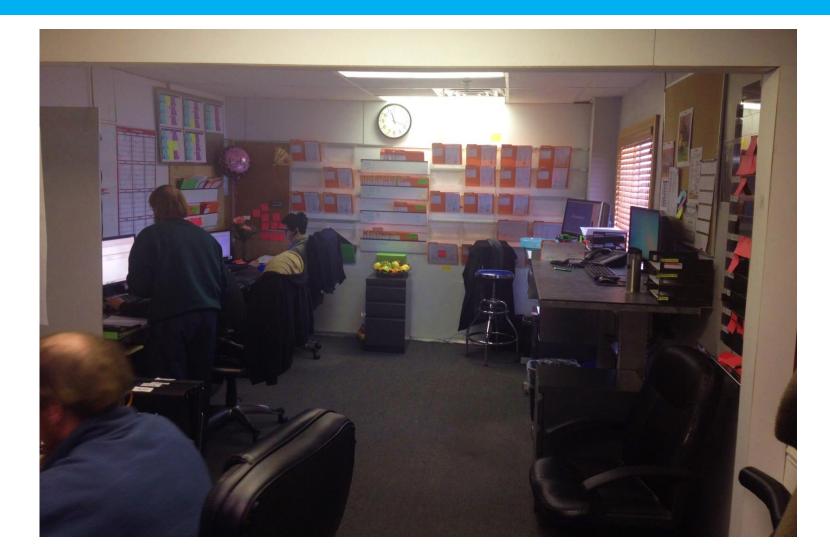




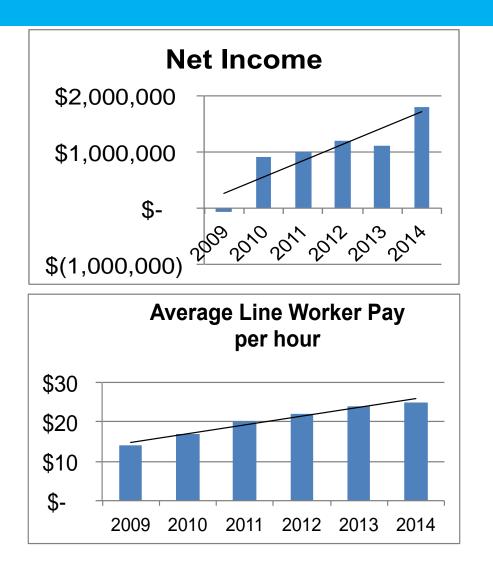


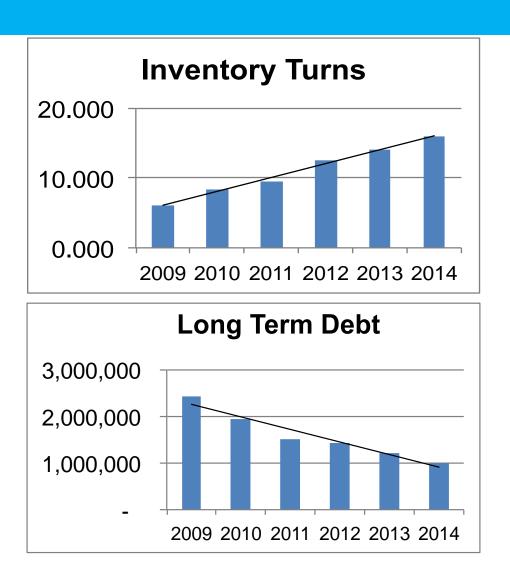


Value Stream 2 Team



Metrics





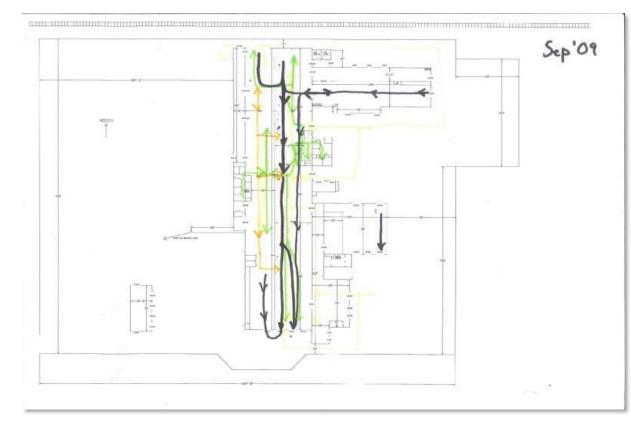
Phases of Lean at ATC Trailers 7 years of hard work!

Improve Flow: 8 months

Before



After



Clean-up the mess: 3 years

Before







Sort, Set, Shine, Standardize and Sustain: 4 years

Before



After



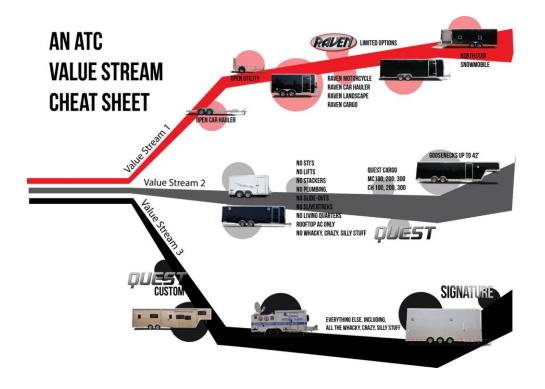
Supermarket/Material Supply System: 3 years

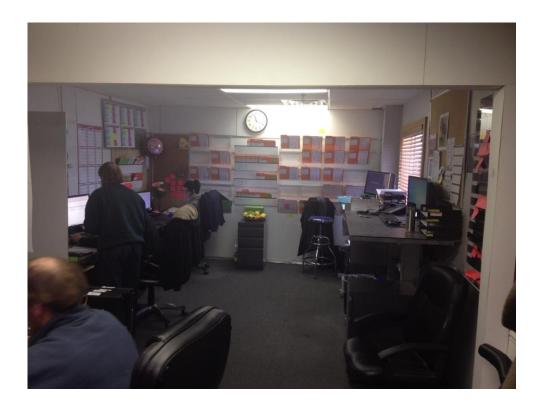






Value Stream Management: 2012 to present





Phase 3: Lean Management System

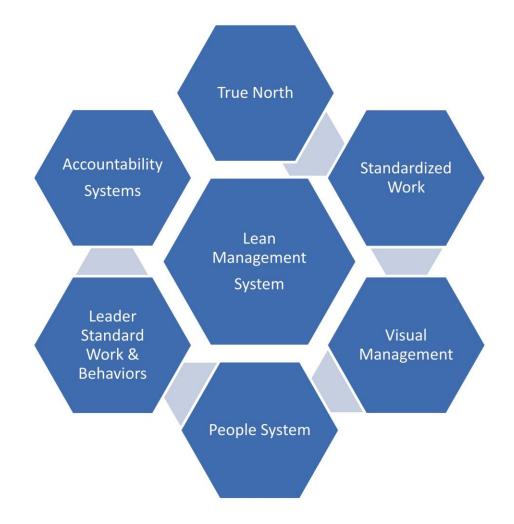
Lean *≠* Process Improvement Tools

Something was missing

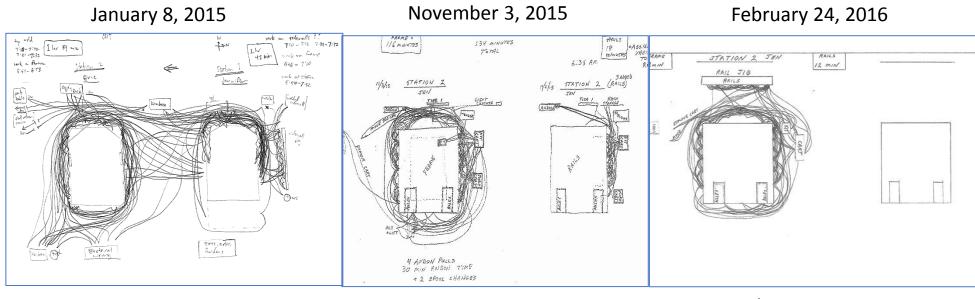
Lean Management System

"Everybody, every where, every day comes together in small teams and reflects on how we did yesterday, where was the waste, and how we can do better today"

–Joe Murli



Open Utility Frame Table



Cycle time 181 minutes

1 Week Production Example

- 5 People
- 6 OCH
- 8 OUT
- \$44,735/week

Cycle time 134 minutes

1 Week Production Example

- 6 People
- 11 OCH
- 25 OUT
- \$93,242/week

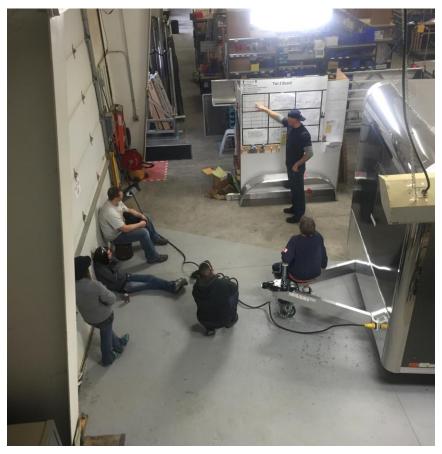
Cycle time 84 minutes

1 Week Production Example

- 7 People
- 13 OCH
- 25 OUT
- \$108,600/ week

Daily Reflection/Tier Meetings

Tier 2-Market



Tier 2-Final



Changing the way we work as human beings -

CAN'T BE DELEGATED!

Lean Accounting

Lean accounting is simple and just makes sense to lean organizations.

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		Company																							
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		End Date	07/26/15		08/02/15	08/09	9/15	08/16/15	0	8/23/15	08/30/15		09/06/15	0	9/13/15	09	9/20/15	09/	/27/15	10/	04/15	10)/11/15	10/:	18/15
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PIVOTPOINT

Breakaway Thinking for Advancing Manufacturing

