

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

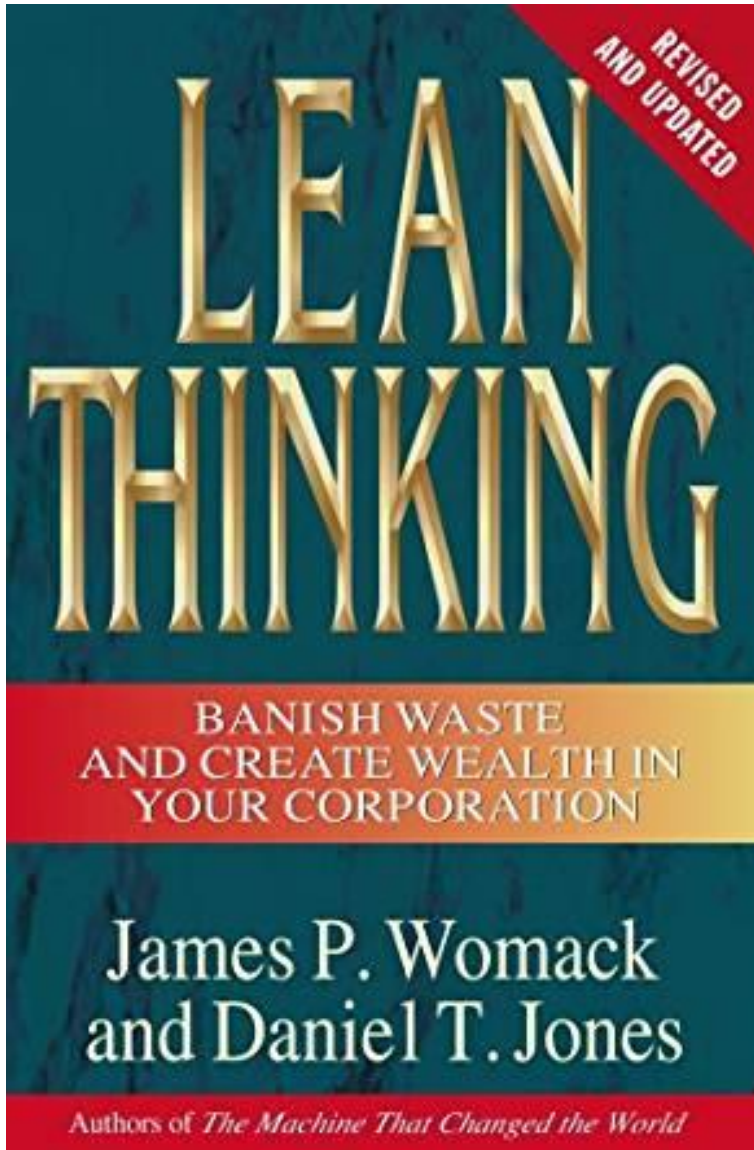
- From individual heroes to strong teams
- From computer driven systems to simple, physical ones
- From complex systems understood by experts to simple systems that give power to the workers
- From job=work to job=work + improving the work (kaizen)



Nappanee Window



Extrusion Mill



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)



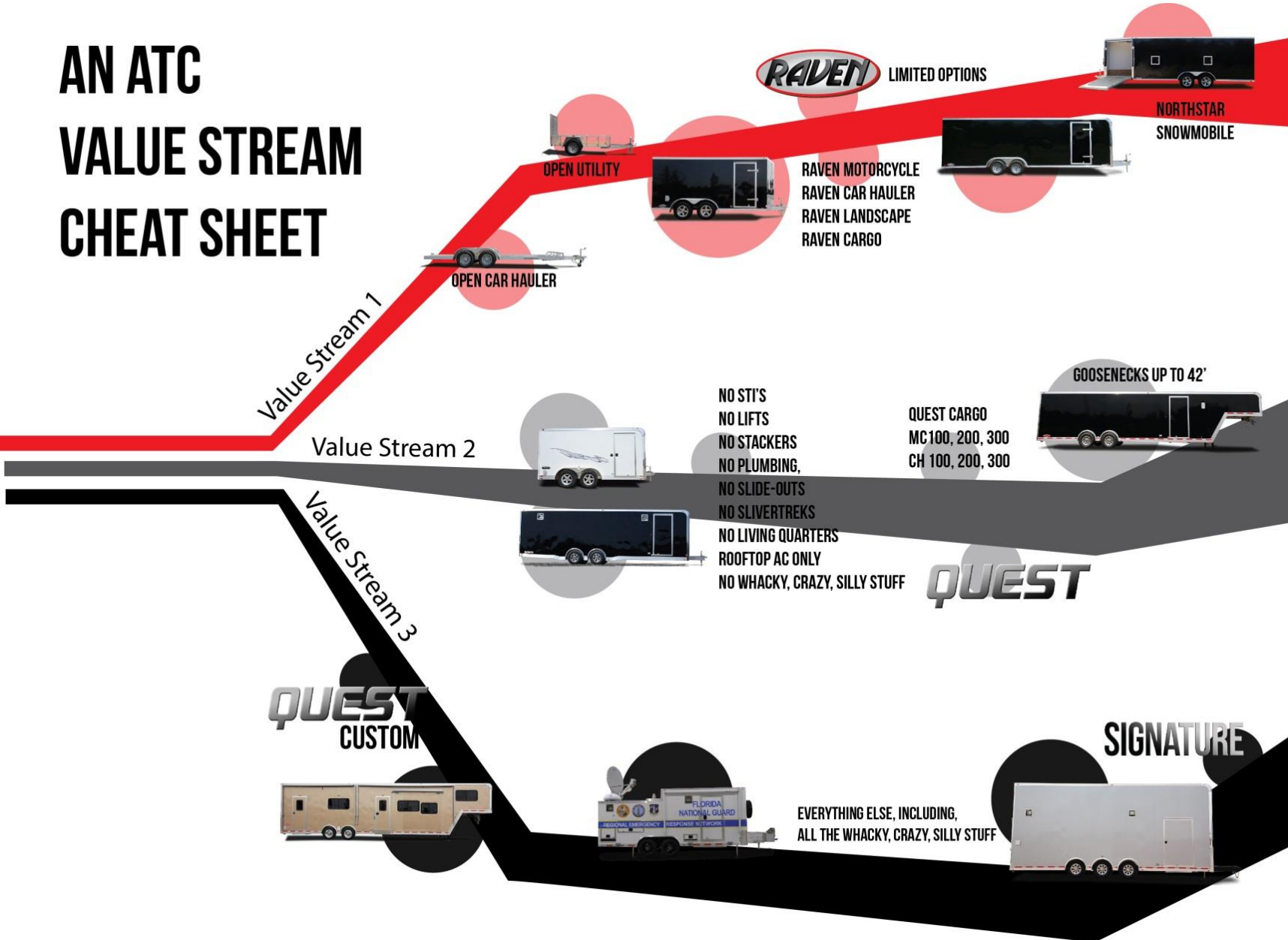
Line 2 (Midline)



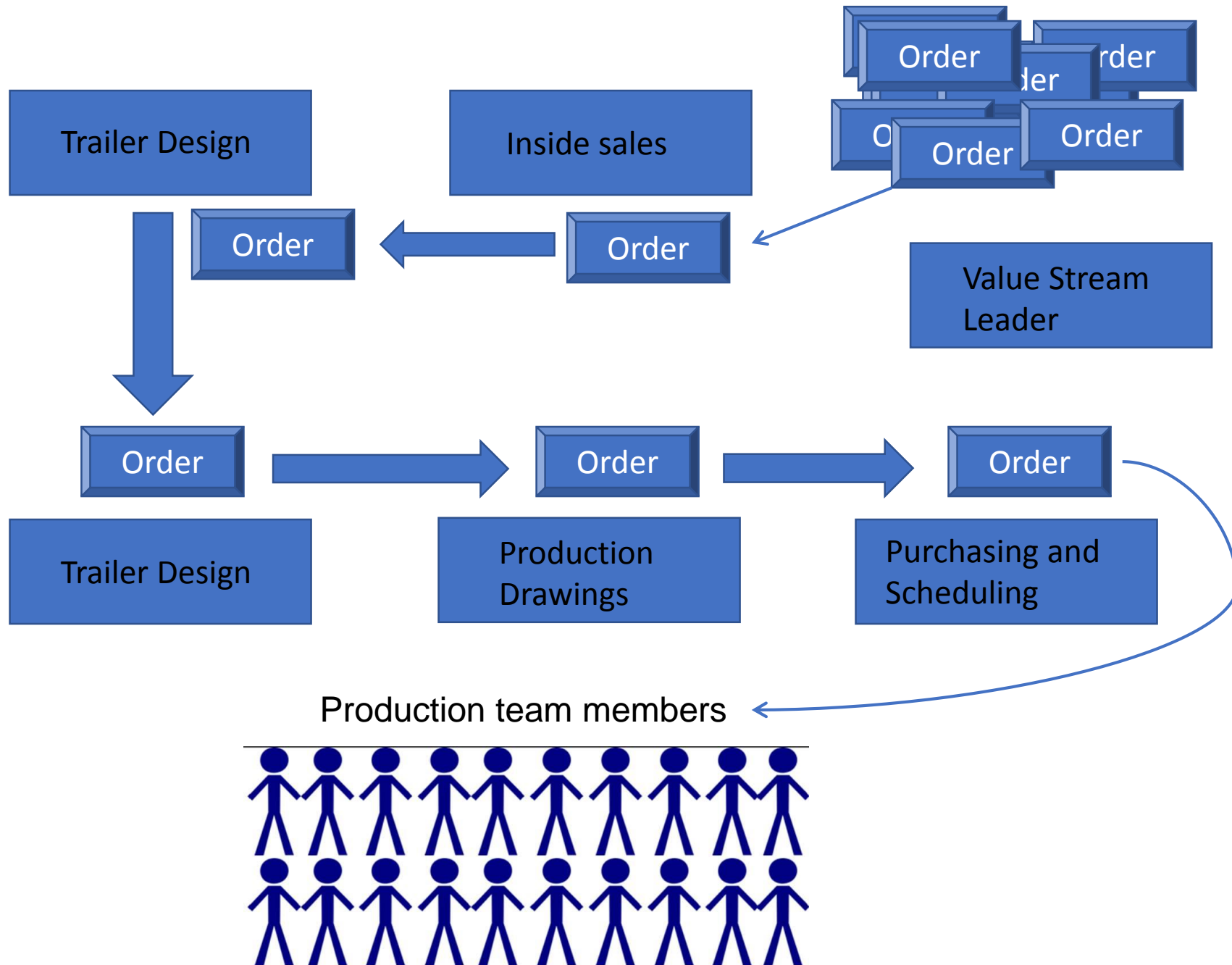
Line 3 (Custom/Large)



AN ATC VALUE STREAM CHEAT SHEET



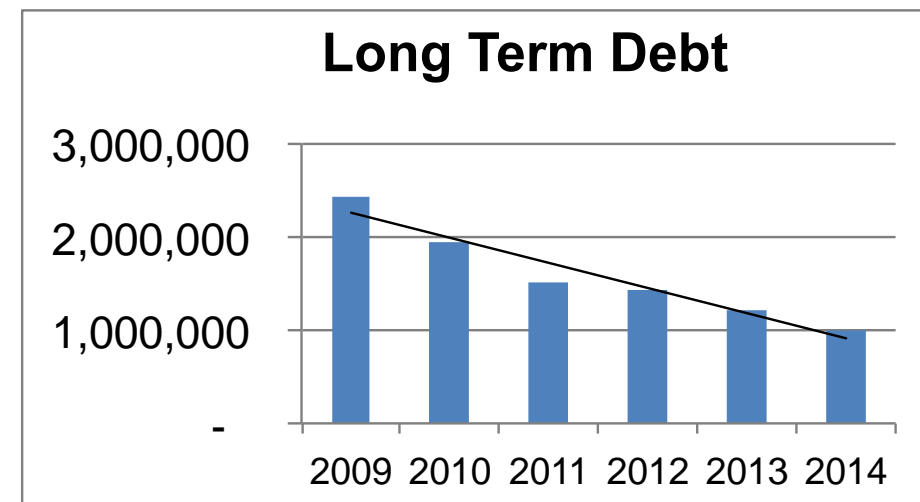
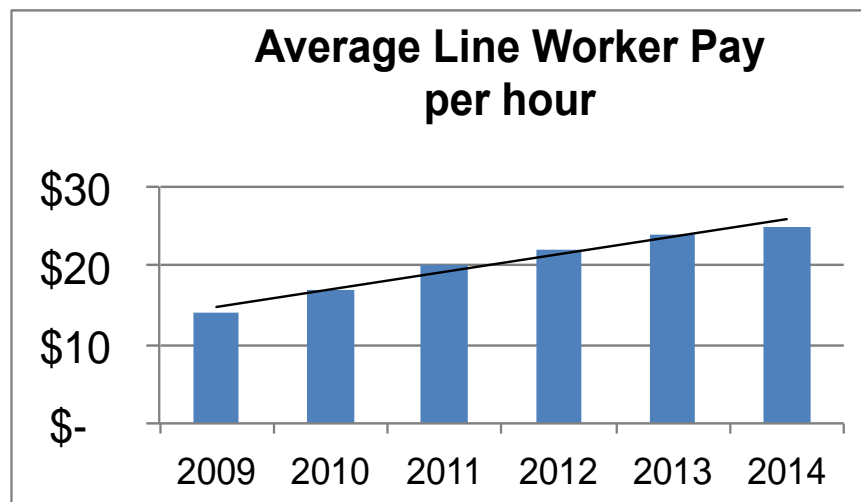
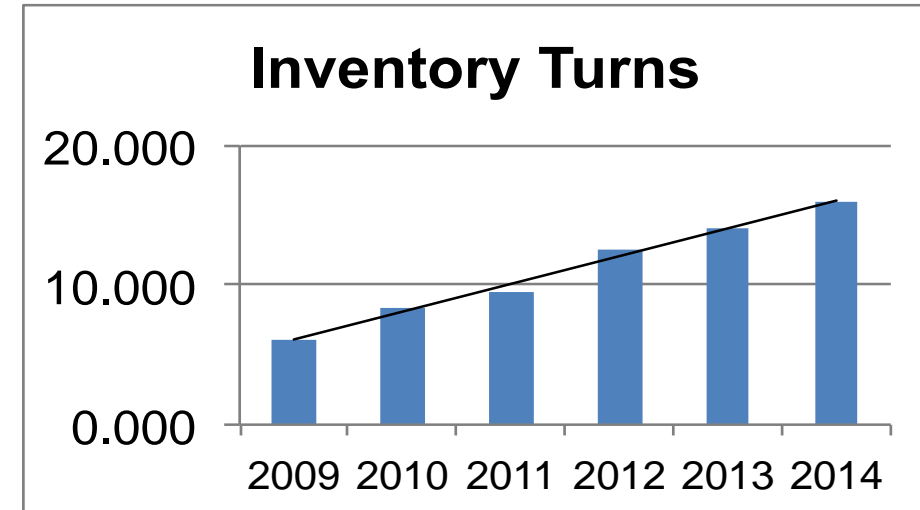
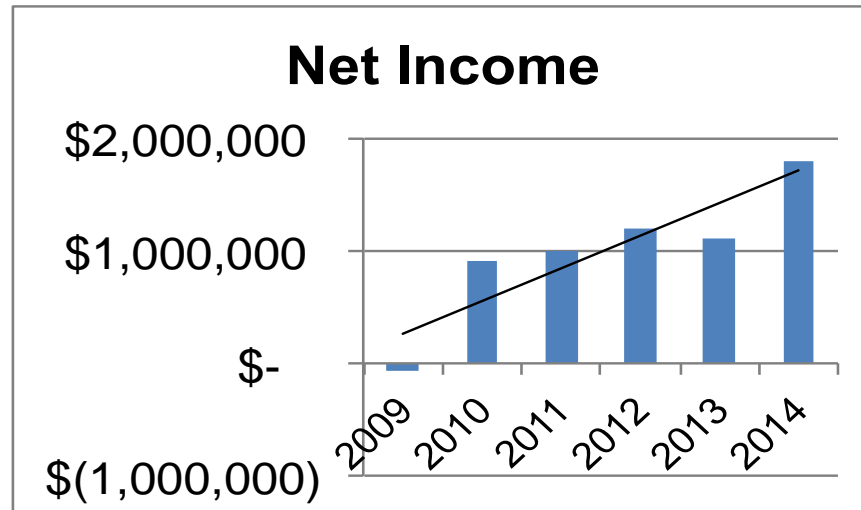
Value Streams



Value Stream 2 Team



Metrics



Phases of Lean at ATC Trailers

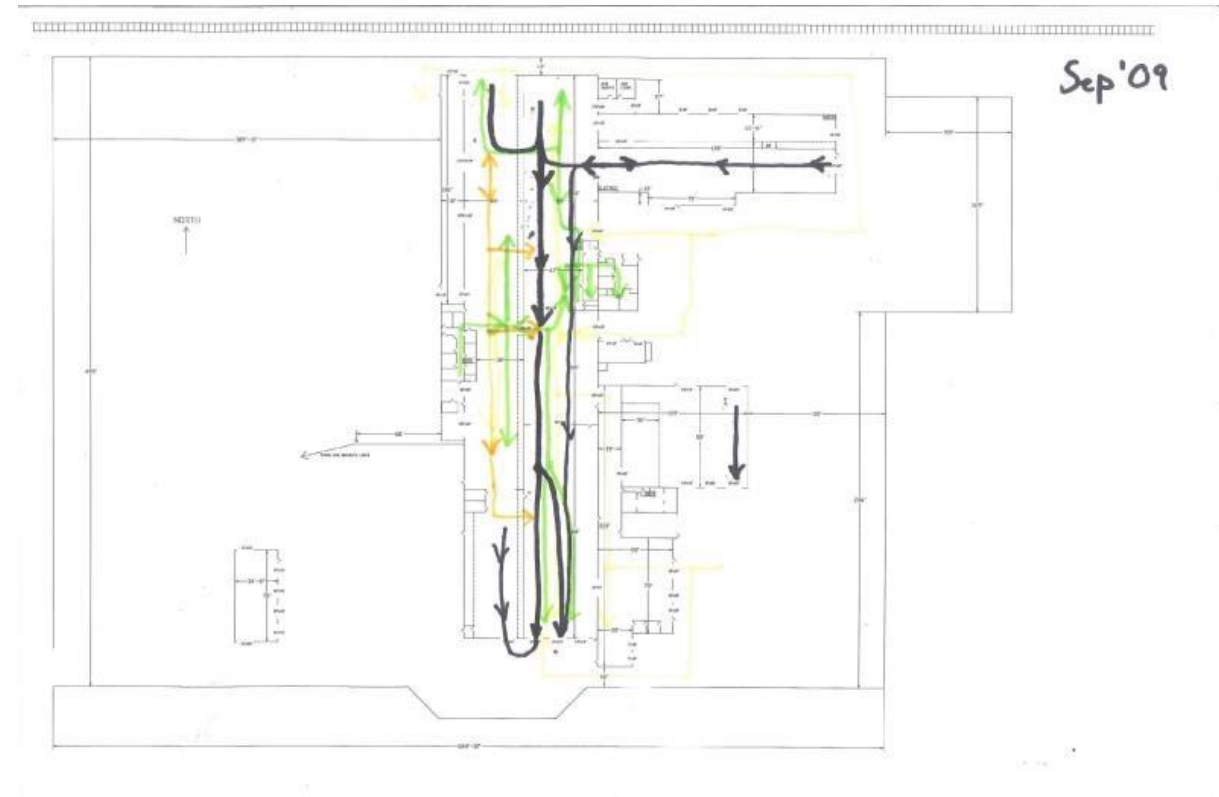
7 years of hard work!

Improve Flow: 8 months

Before



After



Clean-up the mess: 3 years

Before



After



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

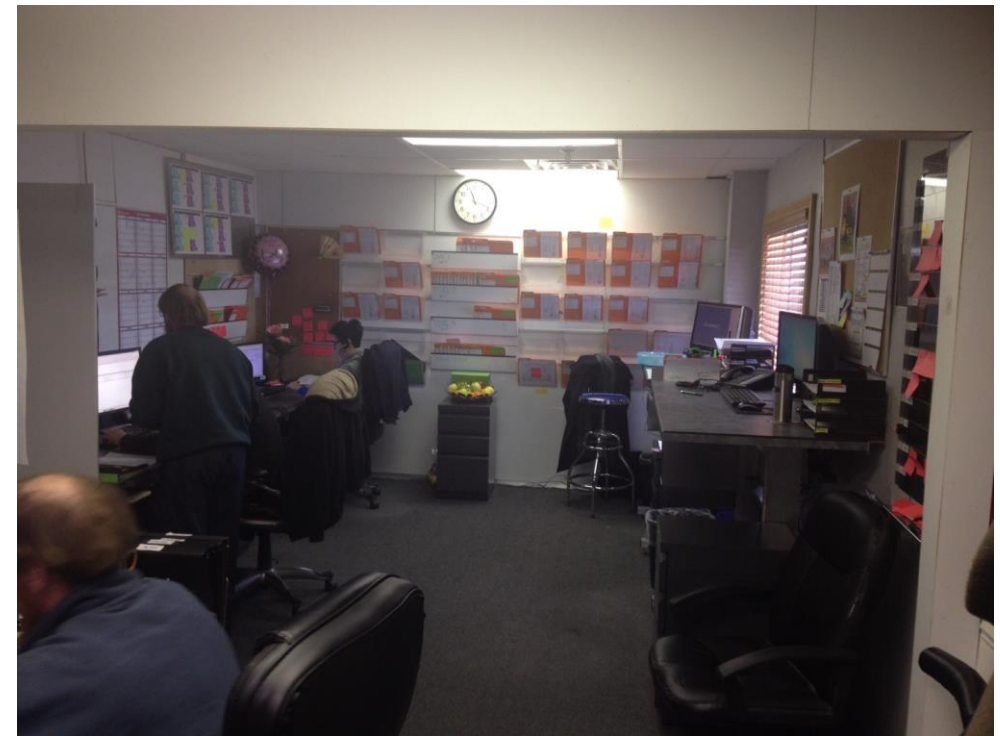
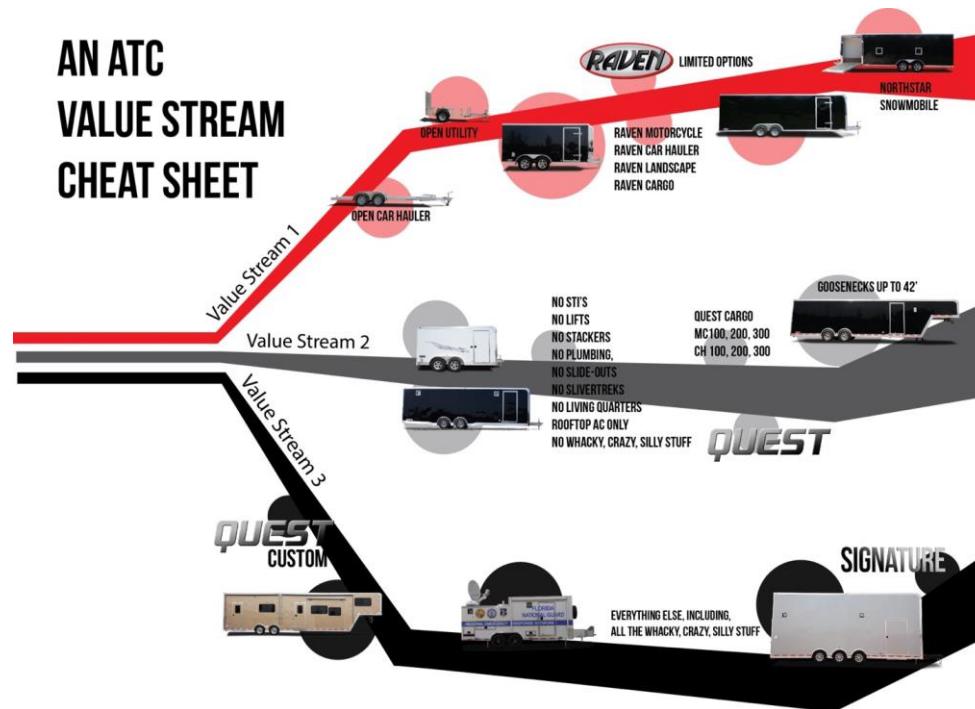
Before



After



Value Stream Management: 2012 to present



Phase 3: Lean Management System

Lean \neq Process Improvement Tools

Something was missing

Lean Management System

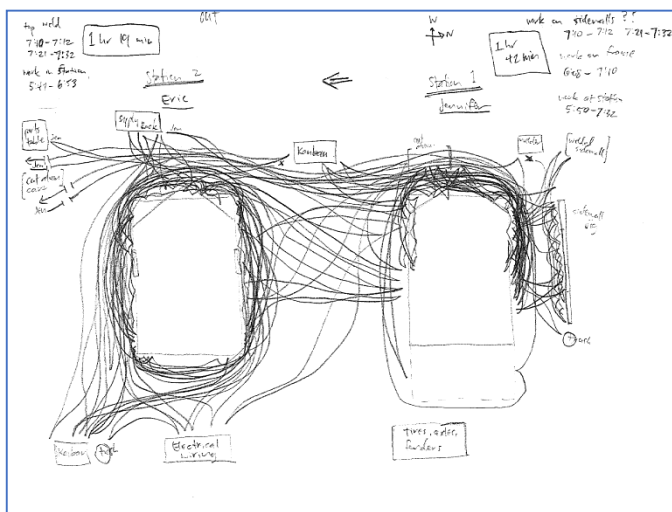
“Everybody, every where, every day comes together in small teams and reflects on how we did yesterday, where was the waste, and how we can do better today”

–Joe Murli



Open Utility Frame Table

January 8, 2015

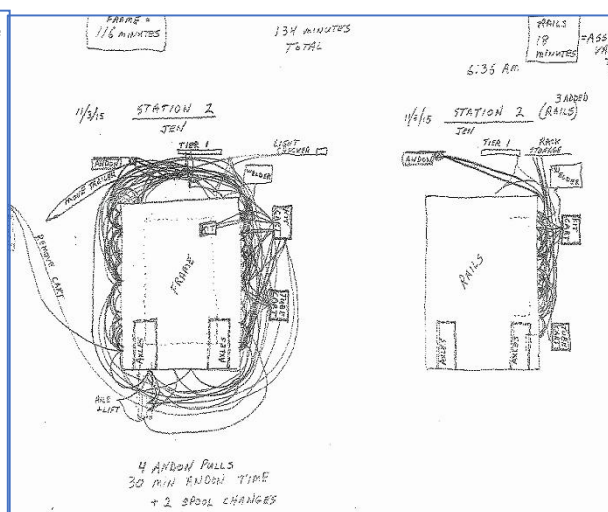


Cycle time 181 minutes

1 Week Production Example

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

November 3, 2015

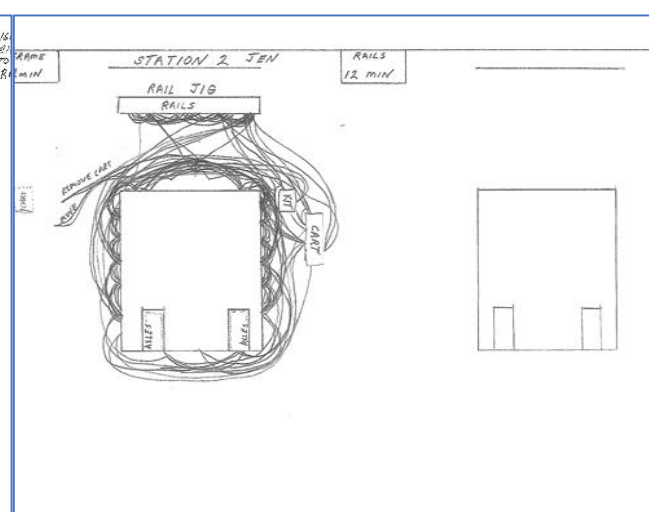


Cycle time 134 minutes

1 Week Production Example

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

February 24, 2016



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.

| | A | B | C | CG | CH | CI | CJ | CK | CL | CM | CN | CO | CP | CQ | CR | CS |
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PIVOTPOINT

Breakaway Thinking for Advancing Manufacturing

progressive|ae