



Managing To Create Problem-Solvers



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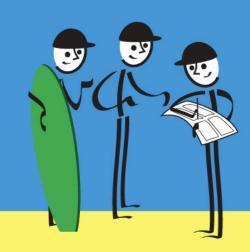
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The Evolution of Lean

Growing Communities of Learners

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From Individual Learning to Learning Together

Where Lean came from:

One of the lean pioneers from the 90s – Lantech

Where Lean is going:

An industry leader that is trying to reinvent itself – Turner Construction – SBP



2017 – Lean Enterprise Institute's 20th Anniversary

A time for reflection:

- Where are we? What has been Lean's triumphs and failures?
- What has been the impact of LEI and of lean in the world?
- Where should LEI and lean be in 5 years?

We will come back to this later......



Toyota's influence on the lean community

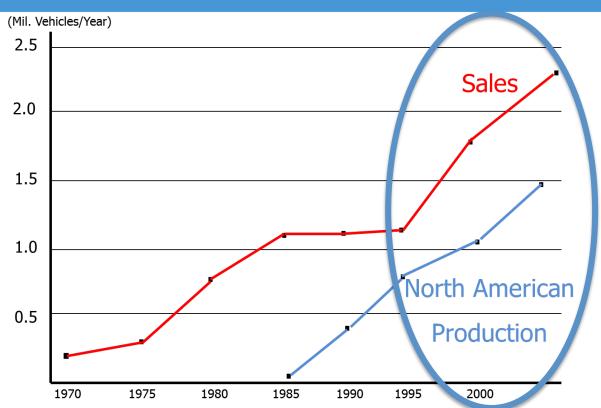
Some Background

- Toyota established and evolved the Toyota Production System over the course of decades, inspired by key thinkers like Taichii Ohno and Eiji Toyoda (40 years)
- In 1984, NUMMI established in California as a key step in Toyota's experiment to take its production system overseas.
- In 1990, "Machine that Changed the World", written by Jim Womack and others revealed the Toyota Production System to the world.
- In 1995-2005, Toyota faced challenge with a sharp spike in demand



What Happened to Toyota During That Timeframe

- Toyota more than doubled sales from '95-'05
- Tripled production capacity in same timeframe







TSSC introduced TPS to other manufacturers

- Established in 1992
- Focused 80/20 on Toyota Suppliers & General Manufacturers (toys, furniture, others)
- 2008 branched out to non-profits, hospitals, government



Toyota clearly saw that TPS could be successful in any industry....

- The tools
- The thinking
- The culture

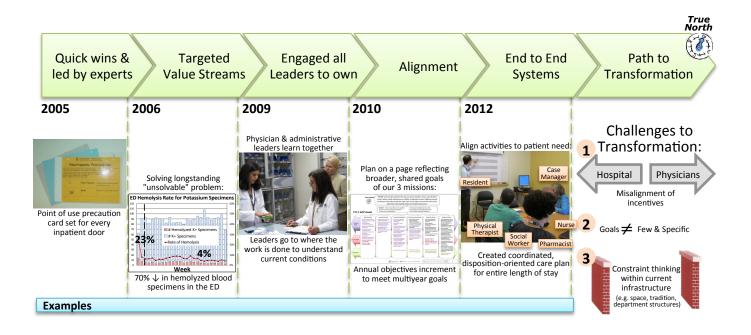
....could be applied in many companies.



TPS enters a nontraditional sector – Healthcare



Evolution of Lean Thinking











Multiple dimensions

2005

2007

· Everyone, Everyday Spread Standardization

Zero defects Highest Productivity

redesign

Path to Transformation

Patient Focus Mutual long term prosperity Be a leader in healthcare

> Strategic Plan Aligned to AOP Process

True North

End to End Systems Beth Israel Deaconess A teaching hospital of **Business Transformation** Perinatal Harvard Medical School Medical Center Pharmacy Supply Chain End to End Patient Flow integrated workflow development with suppliers Room Entry 3P Redesign Build partnerships beyond BIDMC's walls End to End Material Flow IMMS . PAT Standardization: Ambulatory scheduling Alignment FY12 AOP - Migration from Measurement Systems individuals drafting topical Jse AOP process as vehic Managing for Daily Improvement Lean Steerin goals to broader, shared FY13 AOP with linkage to for integrating lean into Committee Strategic Plan Visual Systems what we do Pre-Planning for Strategic Advisory Lean Assessment with Strategic Plan & AOP process with clinical leadership Plan development senior leaders Engaged all Leaders to dwn ThedaCare Business Lean Enterprise Academy Sponsorship Performance System **Board Engagement** Advisory Course Gemba Consultations Leadership Lean thought leader Lean Management System **HVN Site Visits** Walkaround Healthcare Value Network Experts speakers CEO site visit Sloan Fellows **Targeted Value Streams** CC6 ED to Bed Ortho MICU Supply Rooms Farr 2 **RN Floating** Key Examples: Ortho MRI NICU ED/Atrius Co-learning Model lines Lab Control Supply Chain Pilot: RN Documentation Rehab Lab & Perioperative Cath Lab Inpatient Unit (R11) Embedded Engineers Human Development Sustainable Idea systems OI Retreat Shingo Assessment model Improvement sharing Book Club Brown bag Develop coaching capability in leaders forum Lean Study Group Course training Lean training Team Leader Sharing Leadership showcasing of for BID/HMFP leaders Leading in a Lean Thinking Lean Series all Hire based on broader Evaluate performance based on competencies Outbriefs with Senio **Environment Course** Forum improvement teams Annual A3 Improvement BID/HMFP & affiliates Competencies Office Hours Develop staff & physicians as lean practitioners Leadership Poster Symposium Competency Developmen Faculty Hour Failure Conference Post Grad Forum Develop affiliates across the enterprise Quick wins & led by experts East CPD: Facility layout CT in the ED HR Leave of Absence Radiation Oncology ED & Lab/ Hemolysis Staff & physician practitioners leading locally OR Case Carts Diagnostic Breast Imaging Research: IRB Workflow Cyberknife West CPD/OR Pre-Admission Testing Development

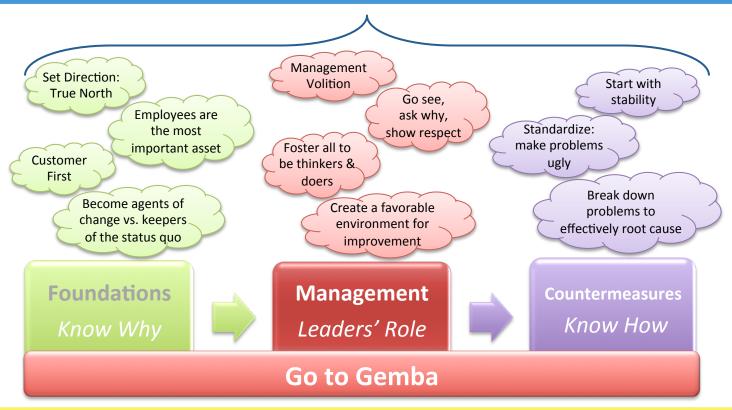
2009

2010

2013 -> Future **Transformation** Lean

Lean Leadership Development

Learn to See



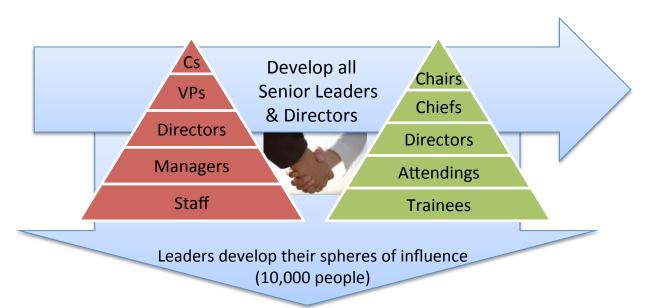








Two Organizations, One Management Team



Ownership = Diffusion









Early Transformation







Leaders applied their new way of thinking into running the business differently

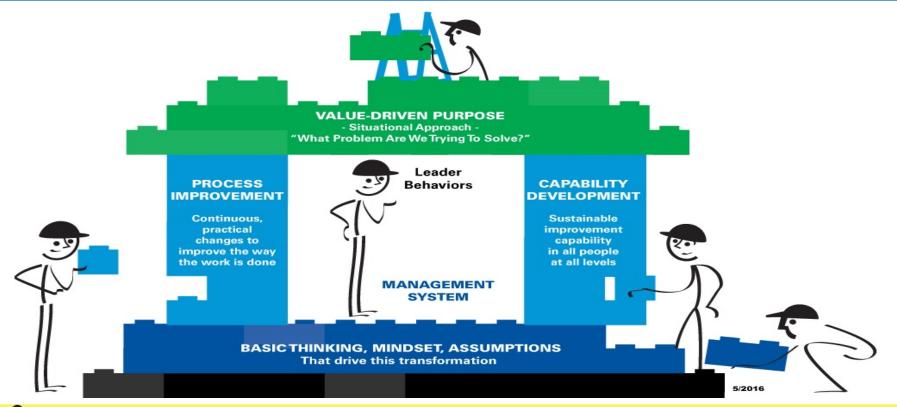








What have we learned? - Lean Transformation Framework







Transformation Questions

- 1. What is our <u>purpose</u>, what <u>value to create</u>, or what <u>problem</u> are we trying to solve,?
- 2. How do we **do and improve** the **actual work**?
- 3. How do we **develop the capabilities** we need?
- 4. What <u>management system</u> and <u>leadership behaviors</u> are required to support the new way of working?
- 5. What **basic thinking** or assumptions underlie this transformation?

https://youtu.be/oeRXOT8lv0g





2017 – LEI's 20th Anniversary

Back to LEI's reflection:

- Where are we? What has been Lean's triumphs and failures?
- What has been the impact of LEI and of lean in the world?
- Where should LEI and lean be in 5 years?



Some of Our Thoughts

- 1) Sectors that strongly impact society (e.g. Non profits, Government)
- 2) Education integrate lean thinking & practice curriculum into university and public educational system
- 3) Positively impact the work of a broader segment of the workforce (not just production)
 - Administration
 - Customer-facing work
- 4) Research what works, what doesn't
- 5) Knowledge Management capture what we've learned to prevent degradation over time, that is shareable, is researchable



Sli.do: Where should LEI & Lean Community invest our energy?

- 1) Sectors that strongly impact society
- 2) Education
- 3) A broader segment of the workforce (not just production)
- 4) Research
- 5) Build deeper knowledge amongst our community; Create communities of learners



Show Slido

Sli.do: Where should LEI & Lean Community invest our energy? *******RESULTS*******

- 1) Sectors that strongly impact society
- 2) Education
- 3) A broader segment of the workforce (not just production)
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Our Challenge to You

Who will you partner with to improve the world?







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