

Thank You!



22ND ANNUAL
MANUFACTURER
OF THE YEAR AWARDS

Awarded by the Manufacturers Alliance

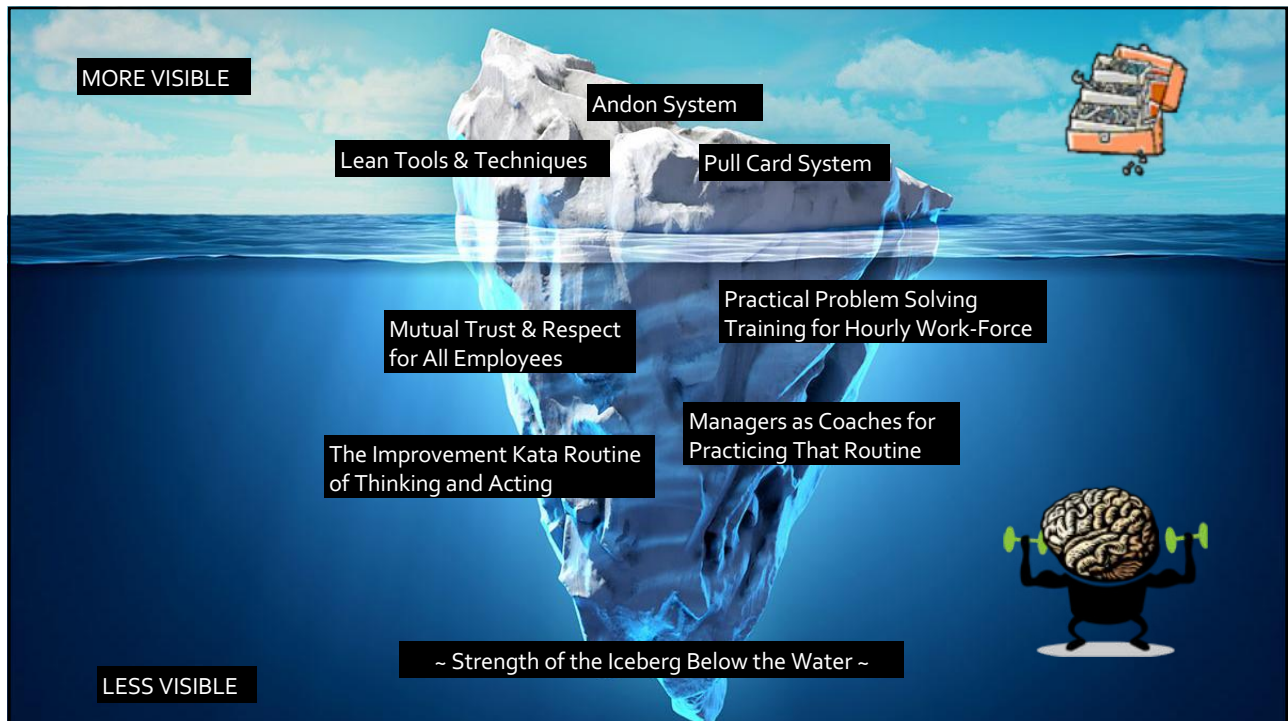
Jerome Hamilton

CEO, Open Therapeutics

Building A Winning Culture!

Lean Troops vs. Six Sigma Troops

~ A Fight To The End ~

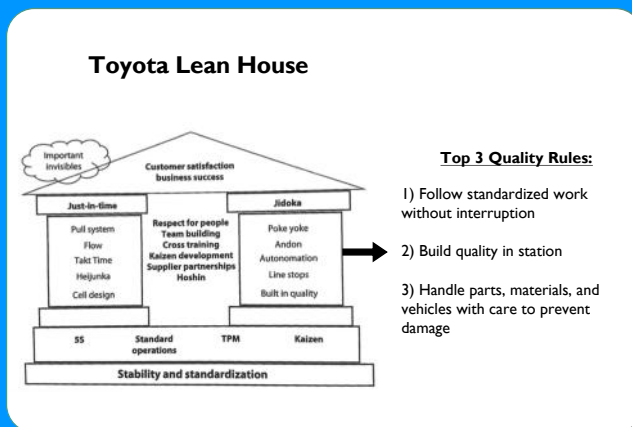


Lean is Culture, Processes, and Methods

- Can the Toyota Production System be copied?
 - “You can’t copy our performance unless you can copy our people’s heads.”
- Toyota Production System was never primarily about the andon cord – it was about creating a “community of scientists” from regular people
- It is hard to follow the Toyota Production System, even at Toyota
- Can operations be the source of competitive advantage (operations can’t be copied)?
 - In the long-term
 - If leadership doesn’t continue to lead improvement

*Notes from a Toyota Presentation at Lean Enterprise “Lean Summit.”

Mutual Respect for People and Teamwork



Valuing and Investing in People:

- Sharing learning experiences
- Productively participating in group problem-solving activities
- Developing systems thinking
- Developing greater sensitivity to and recognition of smaller and smaller deviations from standards

Culture as the Distinctive Differentiating Ingredient of Competitive Advantage

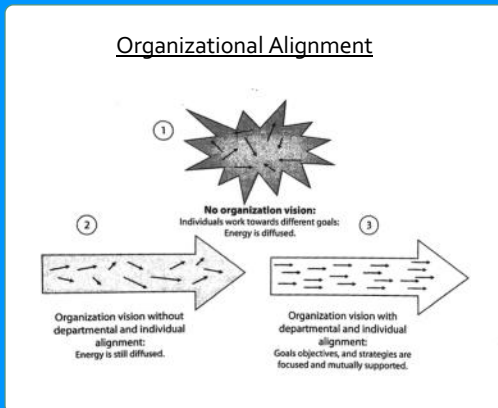
1. Establish social order
 - Makes clear what is expected (KATA → Next Target Condition)
2. Create continuity, perpetuate key values and norms across generations of members
3. Create a collective identity and commitment, binding members together
4. Powerfully affect performance and long-term effectiveness of organizations
5. Have a positive impact on employee morale, commitment, productivity, physical health, and emotional well-being

Lean Culture Engenders A Maniacal Execution Focus

Toyota's elements of mutual trust and respect for all people and Hoshin Kanri are all cultural. It's not about just developing good plans and giving fancy presentations, it's about execution. Everything we've been discussing is cultural. Taking the time to run a bit slower in the beginning to finish faster overall is cultural. That's aligning manufacturing and product development early on so a company can finish faster overall due to better launches. Alignment in itself is cultural.

Jerome Hamilton
It's All Culture

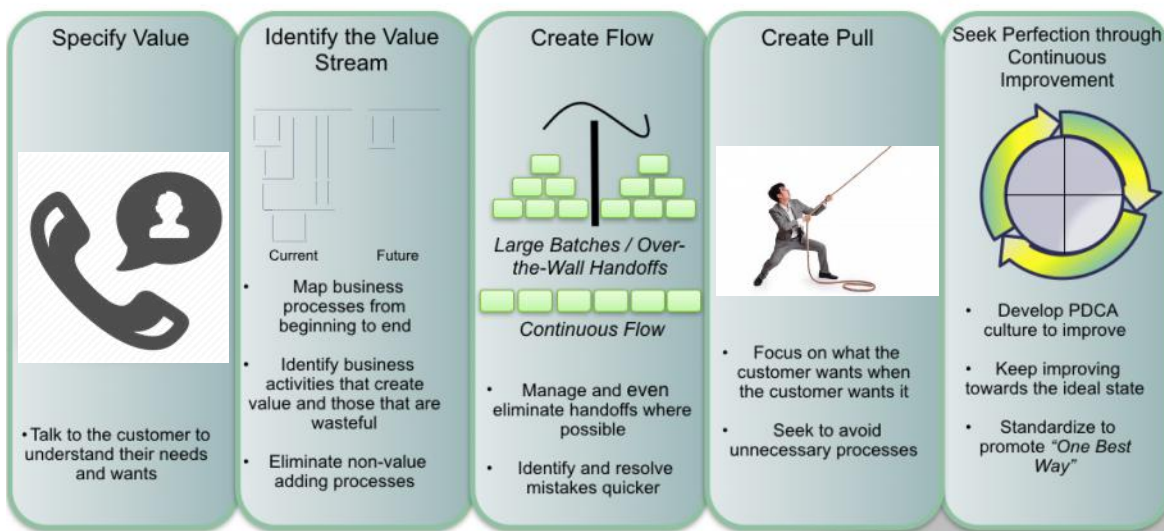
Three Typical Conditions

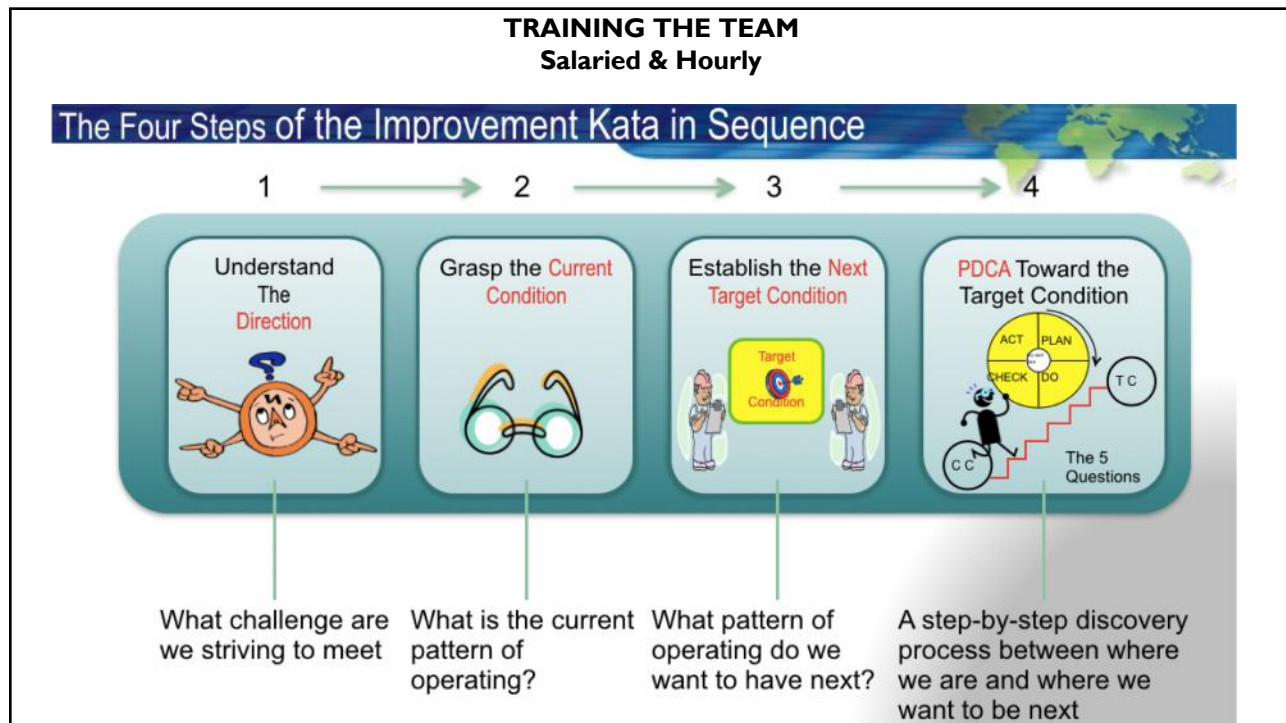


1. No organization vision
2. Organization vision without department and individual alignment
3. Organization vision with departmental and individual alignment

TRAINING THE TEAM Salaried & Hourly

Lean Process Improvement





Problem Solving

• Two Types:

- Abnormality detected when a prespecification is compared to embedded test / result
 - Stability, C_p
- Improvement of prespecification toward ideal state
 - Improving capability, C_{PK}

• Problem Solving Keys:

- Upon visual abnormality, “swarm the problem”
- Perform rapid experimentation
- Favor actual observations of problems
- Stop / fix problems within takt time
- Take determined action to improve toward the ideal case

Developing Team Members into an Army of Problem-Solving Scientists

Leaders as Teacher and Coaches

- Ask questions about team member's job responsibilities and activities.
- What problems are you having?
- Why is this happening?
- What temporary or permanent countermeasures have been considered?
- Why is the implemented countermeasure the best choice?
- Show respect for team members work.
- Verify that clear responsibility is assigned for every process and problem.

Lean Culture Invest In People To Get A Return From Their Applied Knowledge

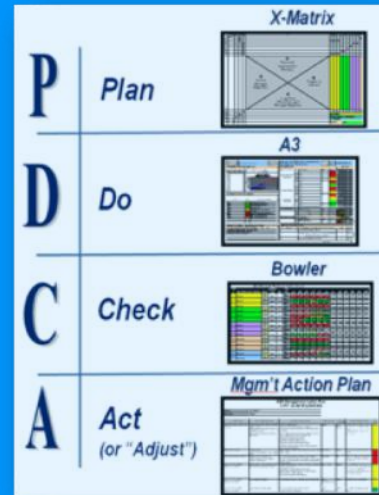
One of the biggest elements of cultural change is not just paying hourly workers for their hands but their minds as well. Getting rid of the eighth type of waste “lack of return on knowledge.” Then training the entire workforce on Lean principles and practical problem solving. Which is what NUMMI did!

Jerome Hamilton

Investing in People to Get a Return

Lean Enterprise – Three Words to Remember

- Resource Allocation and Alignment
 - Focus on Vital Few
 - Cross functional prioritization to deliver “the business plan”
- Accountability
 - Key business metrics have an Owner (A3 owner)
 - Key business metrics are aligned directly to employee contribution & development plans
- Execution
 - Execution and development mindset (plans balance & align with organization’s capacity to implement)
 - Continuous and step-change improvements through business improvement process



The Chief Engineer Role....



Engineer (it's the "Chief's" vehicle...)



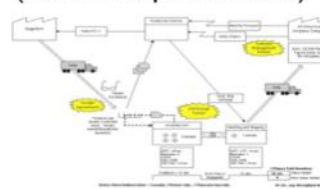
Cross Functions Team



- Manufacturing
- Design
- Development
- Purchasing
- Logistics

The Value Stream Manager Role

Value Stream Leader (Drives improvement)



Cross Functions Team



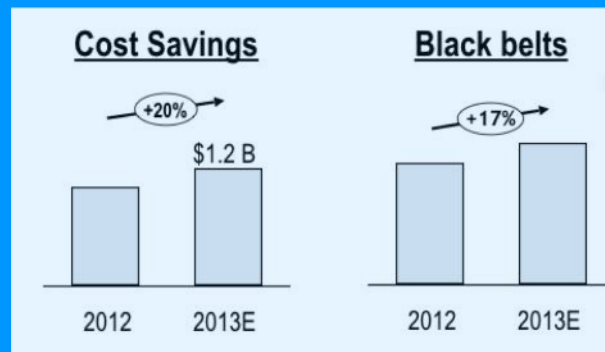
- Manufacturing
- R&D
- Sourcing
- Logistics
- Engineering

Similar To The "Chief" The VSM Should Be Responsible For Objectives Of The VSM

Deployment of Lean Everywhere

Benefits of Lean

- Maximize profits by reducing cost through the elimination of waste
- Accelerate supply chain speed to market
- Common global language and methodology

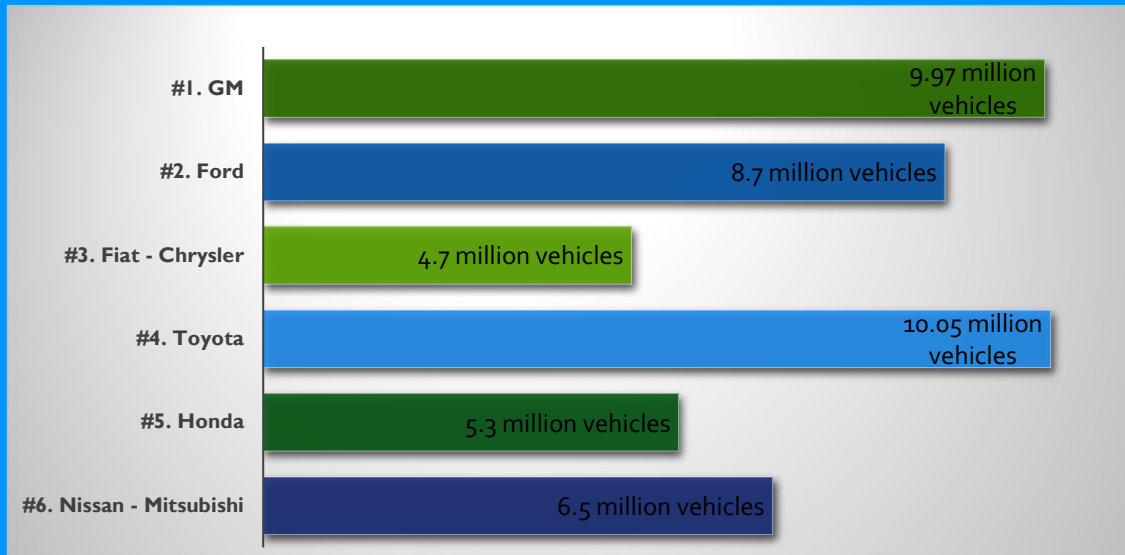


Financial Market Comparisons

	Toyota	Ford	GM
2016 Sales	\$255.528 B	\$151.800 B	\$166.380 B
5 Year Average Gross Profit Margins	18.00%	12.26%	11.16%
Market US Share 2011	12.90%	16.80%	19.60%
Market US Share 2016	14.00%	15.60%	16.90%
Market Share Change	+2.1%	- 1.2%	- 2.7%
2014 Warranty % to Sales Claims Rate	1.60%	2.20%	2.80%
Annual Cost of Warranty Cost	\$1,040,570,024	\$1,700,000,000	\$2,000,000,000

***Toyota's financial results versus Ford and GM**

2016 Top Six US Market Motor Vehicle Company Global Unit Sales



**Toyota has the highest unit sales globally of the top six US market leaders*

NUMMI Investing In People

One of the things I learned at NUMMI was the importance of investing in people. When companies embark on Lean journeys, the word empowerment is often used. I think some people misunderstand empowerment. I've heard many floor operators say, "Aren't we suppose to be empowered?" The answer should be, "Yes, you're empowered to help deliver the business results with in our system." Therefore, people must be well trained and engaged enough to understand what the key goals and objectives are. At NUMMI it was mandatory for me to take courses like practical problem solving, PDCA, to learn how to create standard work and apply Hoshin Kanri. I also had to work the production floor an entire day in each department to gain a better understanding of what the operators were experiencing. This allows for better decision making.

Jerome Hamilton

Investing in People at NUMMI

Thank You!



22ND ANNUAL
MANUFACTURER
OF THE YEAR AWARDS

Awarded by the Manufacturers Alliance