

# Lean Concepts and the Cardinal Health Experience

**Todd Thompson**  
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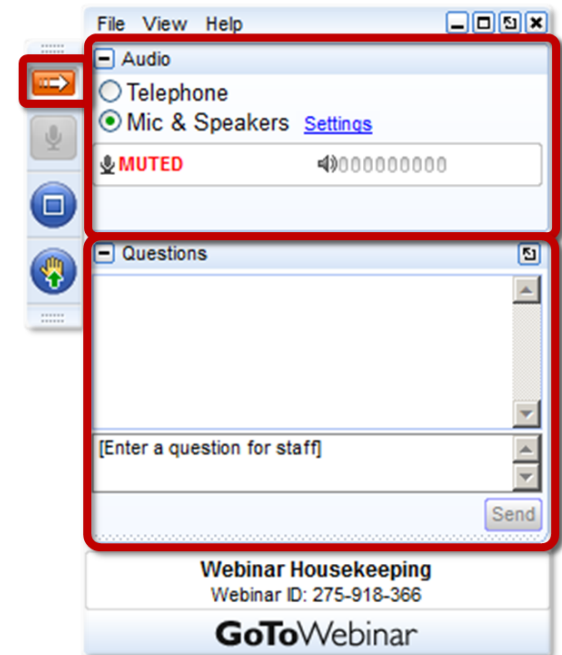
- Founded in 2000
- Trained 503,000+ Lean Six Sigma professionals
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## Select Customers:



# Today's Program

- Welcome
- Introduction of MBB Webcast Series
  - Ellen Milnes, [MoreSteam.com](http://MoreSteam.com)
- Speaker:
  - Todd Thompson, Cardinal Health
- Open Discussion and Questions



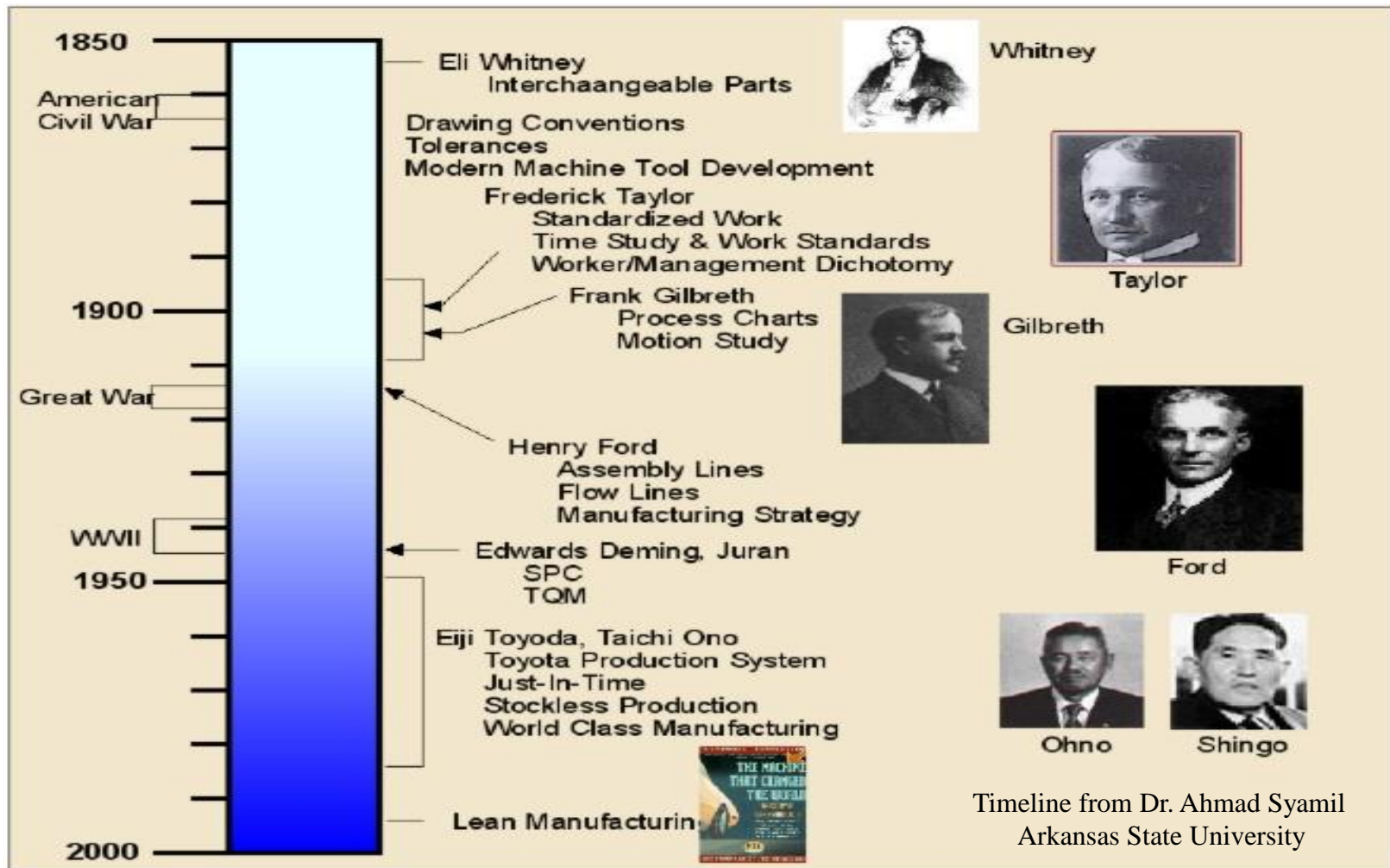
# About Our Presenter



**Todd Thompson**

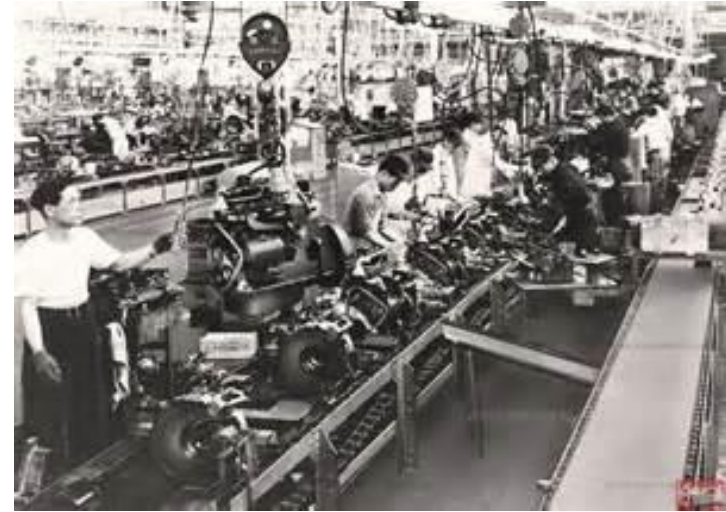
*Director of Operational Excellence –  
West Region, Cardinal Health*

# Lean History and Timeline





# Taiichi Ohno and the Toyota Motor Company



# The vowels in English are . . .

“a” “e” “i” “o” and “u”

The Japanese language has vowels, too

“a” as in awsome

“i” as in Nissan

“u” as in Juke

“e” as in gets

“o” as in bold



“Awsome Nissan Juke gets bold.”



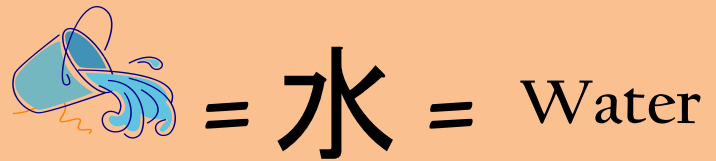
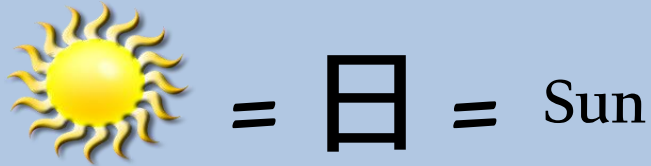
Japan had no written language of its own.













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# Pictographic Written Language



# Common Japanese “Lean” Terms

Term	Literal Translation	Lean Meaning	Pronunciation
Andon 行灯	Traditional Japanese Lamp	Large Communication Board	“Ah/n/doh/n” 
Gemba 現場	Real / Place	Place Where It Actually Happens	“Geh/m/bah” 
Genchi Gembutsu 現地現物	Actual Place / Actual Thing	Go and see (at the location)	“Geh/n/chee/ Geh/m/buh/tsu” 
Hansei 反省	Self Examination/Reflection	Self-Reflection / Personal Responsibility	“Hah/n/seh/ee” 
Heijunka 平準化	Level/Apply/Change	Level Production	“Heh/ee/juh/n/kah” 
Hoshin 方針	Direction/Needle (Compass)	Policy Deployment	“Hoh/shee/n” 
Jidoka 自働化	Self/Work/Change	Automation w/Human Intelligence	“Jee/doh/kah” 
Kaizen 改善	Change / Good	Continuous Improvement	“Kah/ee/zeh/n” 
Kanban 看板	Watch Over/Board	Material “Pull” System	“Kah/n/bah/n” 
Muda 無駄	Nothing/Trash(Rubbish)	Waste	“Muh/dah” 

# Japanese “Lean” Terms (Cont’d)

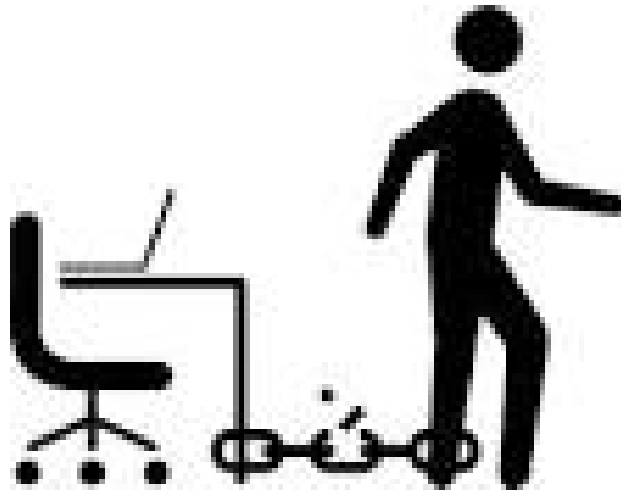
Term	Literal Translation	Lean Meaning	Pronunciation
Mura 斑	Unevenness	Uneven/Unbalanced (Work)	“Muh/rah” 
Muri 無理	Nothing/Reason	Over-burden employees/machines	“Muh/ree” 
Nemawashi 根回し	A Root/Circulate (Rotate)	Gain Consensus	“Neh/mah/wah/shee” 
Poka Yoke ポカヨケ	Mistakes / Avoid	Error Proofing	“Poh/kah/yoh/keh” 
Seiri 整理	Arrange/Reason	Sort – 5S	“Seh/ee/ree” 
Seiton 整頓	Arrange/Prepare	Set in Order – 5S	“Seh/ee/toh/n” 
Seiso 清掃	Clean/Sweep	Shine – 5S	“Seh/ee/soh” 
Seiketsu 清潔	Clean/Clear	Standardize – 5S (“Spic’n Span” in many organizations)	“Seh/ee/keh/tsu” 
Shitsuke 躰	Discipline (Training)	Sustain – 5S	“She/tsu/keh” 
Yokoten 横展	Horizontal, Lateral, Sideways/Display, Expand	Horizontal Deployment	“Yoh/koh/teh/n” 



# Andon: Communication Board



# Gemba: The Place Where It Actually Happens



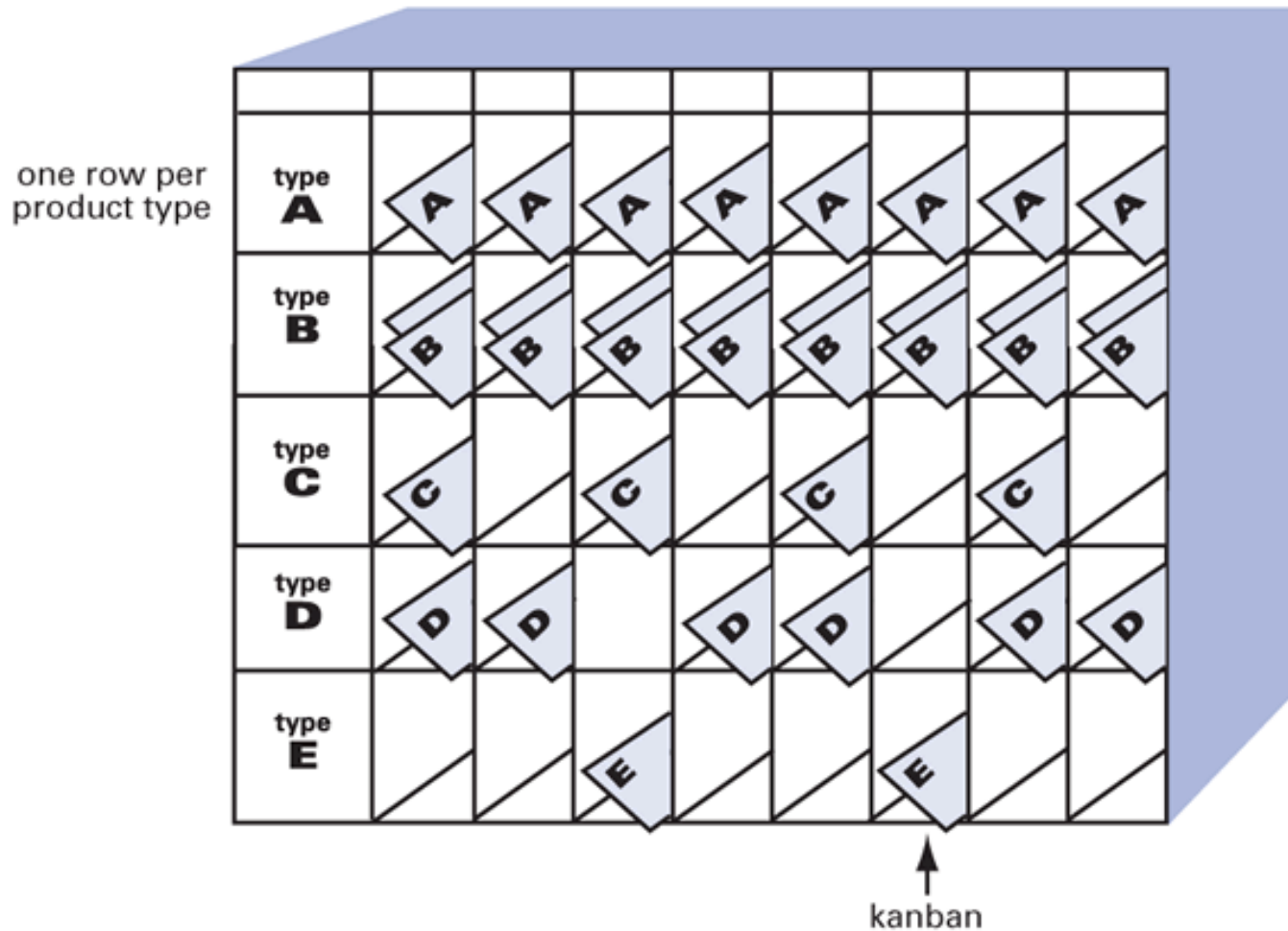
# Hansei:

## Self Reflection and Personal Responsibility

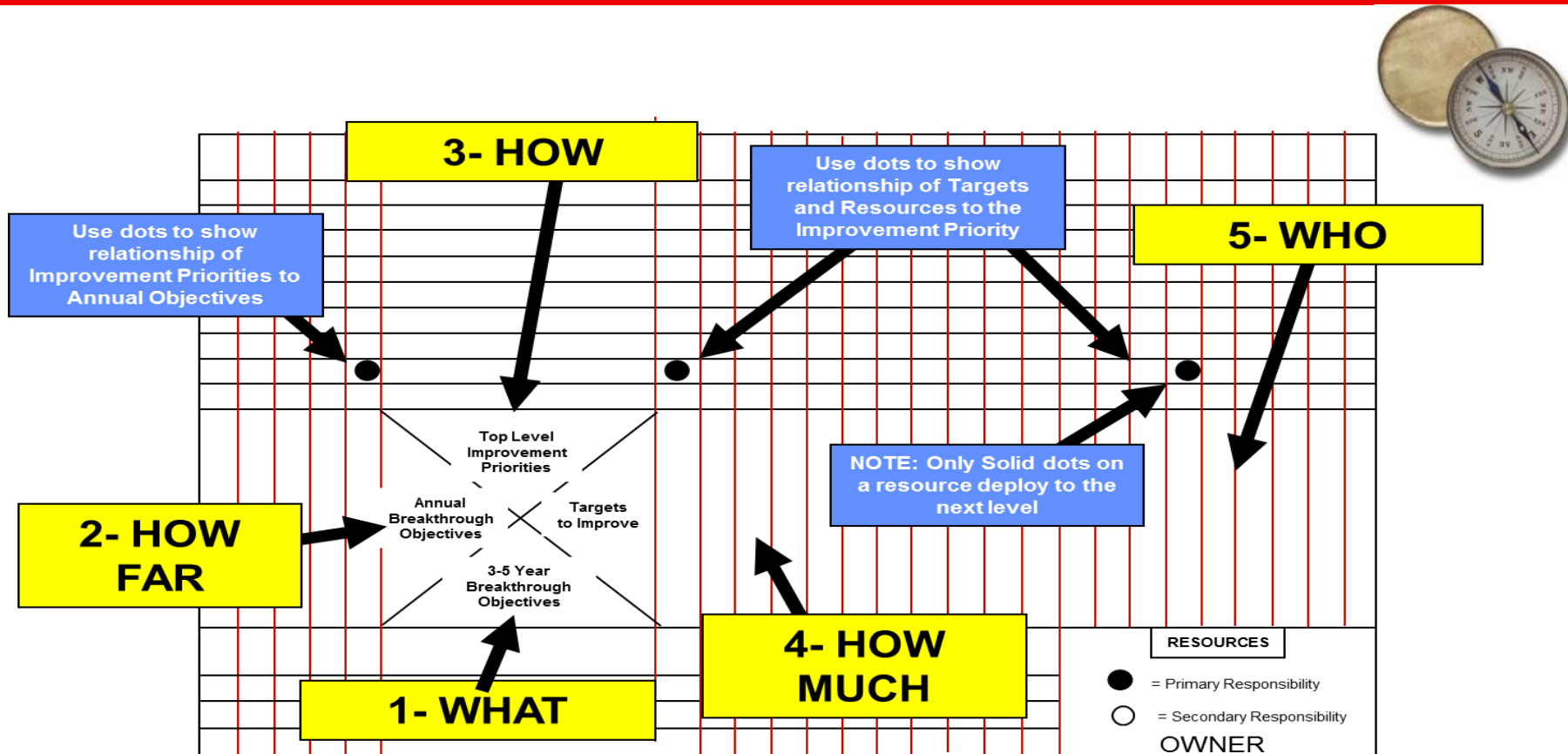




# Heijunka: Level Production



# Hoshin: Policy Deployment



**The whole picture of your company on one sheet of paper!**

# Jidoka: Autonomy + Automation = Autonomation





# Kaizen: Continuous Improvement

改

*kai* (change, correct, innovate)

+

善

*zen* (good)

=

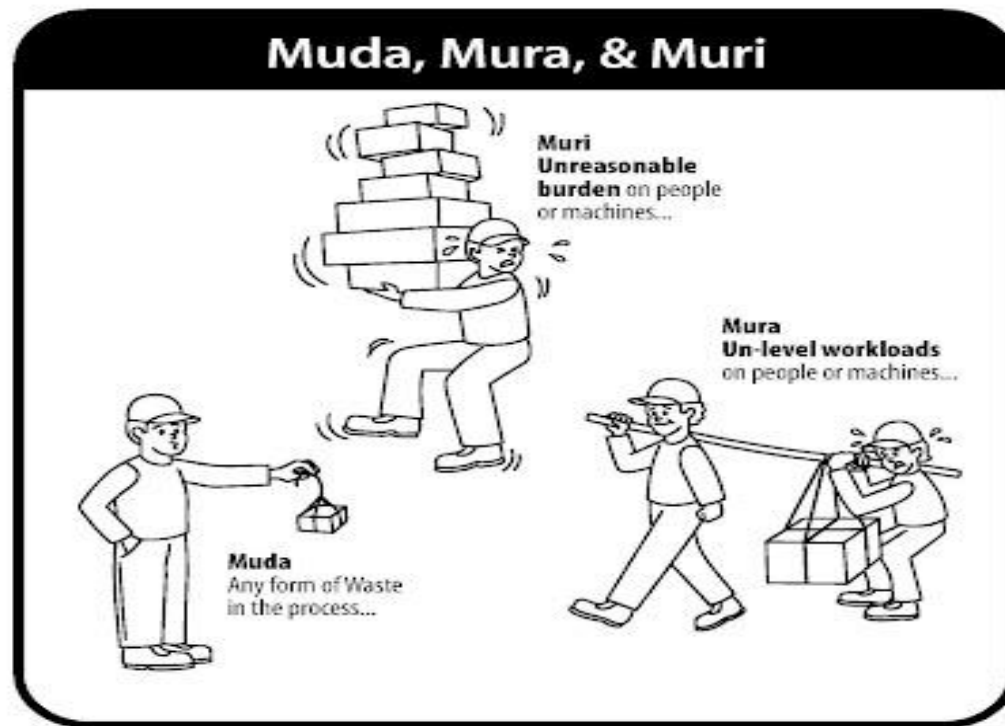
改善 *kaizen* (change for the good or improve).

# Kanban: Material “Pull” System



# Muda, Muri, and Mura:

## Waste, Overburden, and Unbalance



# Poka-yoke: Error Proofing



# Nemawashi: Gain Consensus





# Yokoten: Horizontal Deployment



# ***Operating system guiding principles***

- **Create value for the customer** – Only the customer can define value – what is it that they (customer) perceive as value?
- **Align the value streams** – create the “eyes” for seeing waste and work to eliminate activities that do NOT add value for the customer
- **Create flow and customer driven pull** – design and product “Flow” smoothly and rapidly at the “Pull” of the customer
- **Seek perfection** – speed up the cycle of improvement in the pursuit of perfection
- **Respect every individual** – core to our values, relies on enabling a capable workforce that can rapidly change to meet the changing demands of our customers

# Vision – World class behaviors

## Operational Excellence Based on five disciplines

- 1 Customer focus** Knowing with absolute certainty what our customers value and delivering it reliably and profitably – “The Quality they demand, the Service they deserve, from People they can depend on.”
- 2 Right offerings** Delivering only the products and services that create increasing value for customers and Cardinal Health.
- 3 Process excellence** Determining the best way to do our work and improving it from there -- eliminating waste and increasing reliability.
- 4 Speed** Being agile -- eliminating what our customers do not value, and delivering what they require in time.
- 5 Right investment** Making only the investments that ensure we exceed customer, employee, and shareholder expectations.

*We achieve this through the use of Lean Six Sigma and other process improvement tools.*




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- Achieve **absolute customer** preference built on execution
- Create a **culture** that **relentlessly pursues** waste elimination, cycle time minimization, and customer loyalty
- Embed **metrics** that **drive** operational excellence **goals and culture**
- Achieve full **productive utilization** of resources and assets
- Drive **zealous leadership** participation

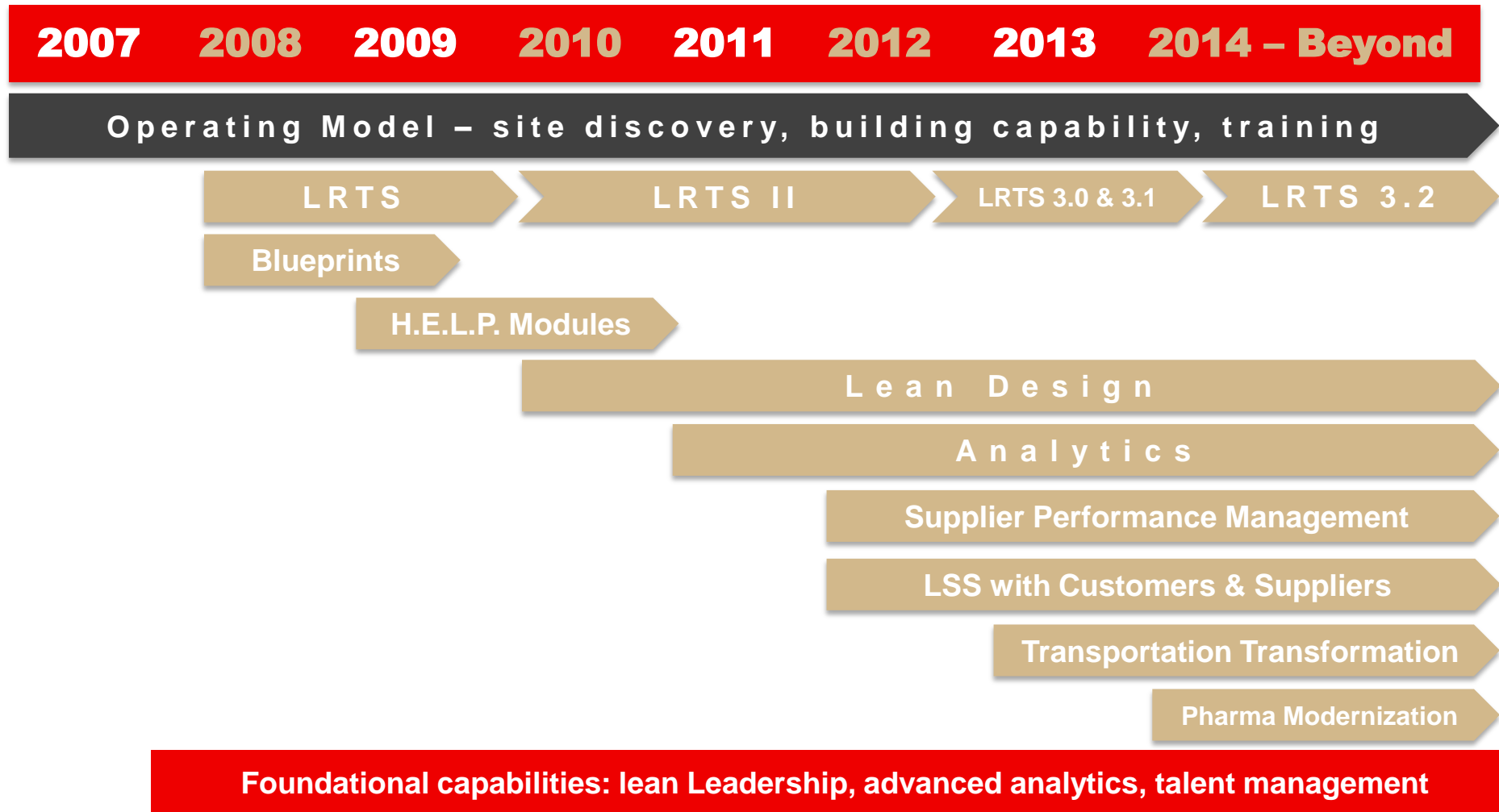
# Concept to reality

<ul style="list-style-type: none"> <li>•Pre-launch - 2004</li> <li>•Process improvement</li> <li>•Quality and Operations</li> <li>•Sizing the opportunity</li> <li>•Evaluating the capability</li> <li>•Drive cost out</li> </ul>	<ul style="list-style-type: none"> <li>•January – accelerate</li> <li>•June –169 BB, 297 GB, 209 KL, 1,600 sponsors,</li> <li>•Shift to “Value Stream”</li> <li>•Pharma Lean</li> <li>•Innovation awards</li> </ul>	<ul style="list-style-type: none"> <li>•Shift to “Value Creation”</li> <li>• Supply chain lean</li> <li>•Talent Review and requirements</li> <li>•Top Gun</li> <li>•June - 209 BB, 1,037 GB/KL</li> </ul>	<ul style="list-style-type: none"> <li>• Enterprise capability</li> <li>•Perfect processes</li> <li>•Value stream alignment</li> <li>•ACFC / ACFS</li> <li>•+95 promotions</li> <li>•1,025 improvement projects</li> </ul>	<ul style="list-style-type: none"> <li>•\$1.0B achieved</li> <li>• \$1.5B working capital achieved</li> <li>•Lean Leader 1,2,3</li> <li>•300+ promotions</li> <li>• &gt; 8,000 projects</li> <li>• &gt;100 customer engagements</li> <li>•Academy &amp; external work</li> </ul>
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2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

 <ul style="list-style-type: none"> <li>•May 2005, full deployment launch</li> <li>•12 Site Assessments</li> <li>•June, Sponsor, BB, Kaizen</li> <li>•December summit</li> </ul>	<ul style="list-style-type: none"> <li>•Top Gun</li> <li>•Medical lean</li> <li>•MBB promotions</li> <li>•June - 160 BB (net of 55 “PTS), 835 GB/ KL</li> </ul>	<ul style="list-style-type: none"> <li>•Top Gun</li> <li>•ACFC trials</li> <li>•MBB promotions</li> <li>•June:- +65 promotions</li> <li>•Full value stream view</li> <li>•Lean office</li> <li>•HVN Sponsor</li> </ul>	<ul style="list-style-type: none"> <li>• Lean Road Maps - full enterprise</li> <li>• ACFC / S expansion</li> <li>• MBB Internal candidates</li> <li>• Shingo Assessor workshops with HVN</li> </ul>
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# Operating System journey





# Engagement journey

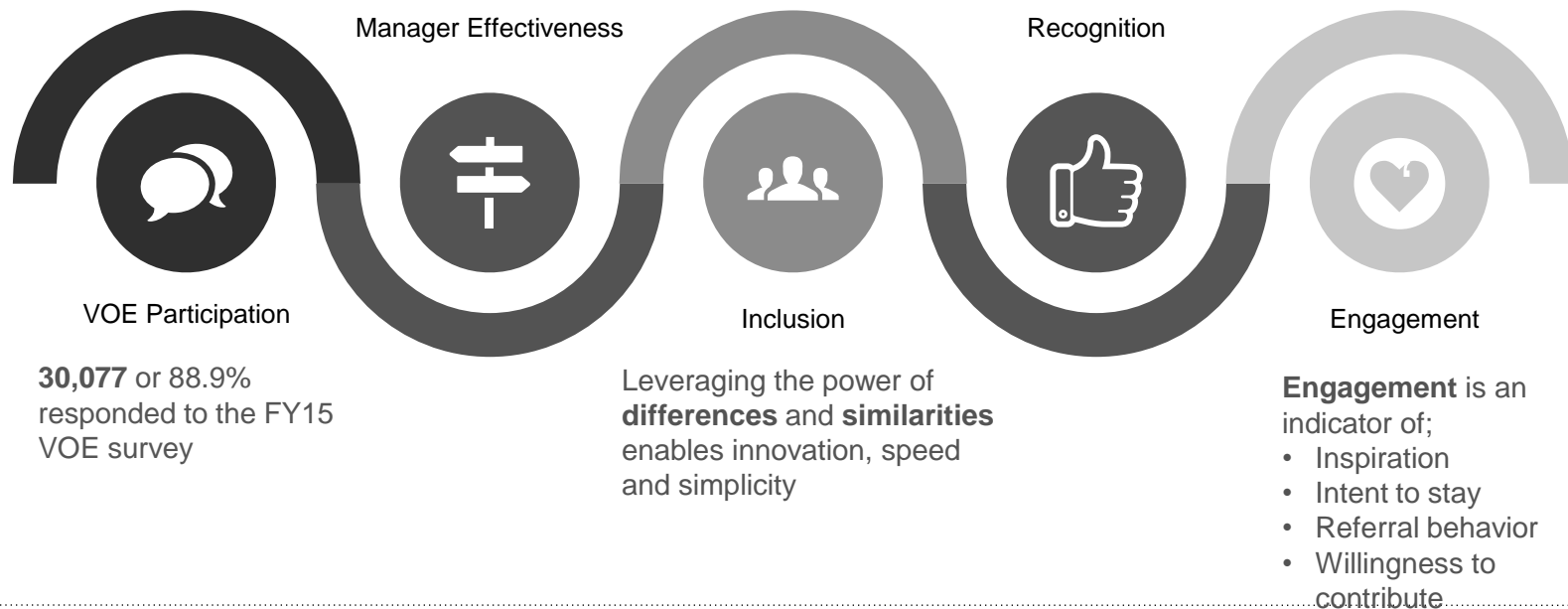
We know **Manager Effectiveness**

at CAH correlates with;

- Lower overtime
- Increased sales
- Higher employee engagement

**60% of** the Employee Engagement drivers at CAH are forms of **Recognition**.

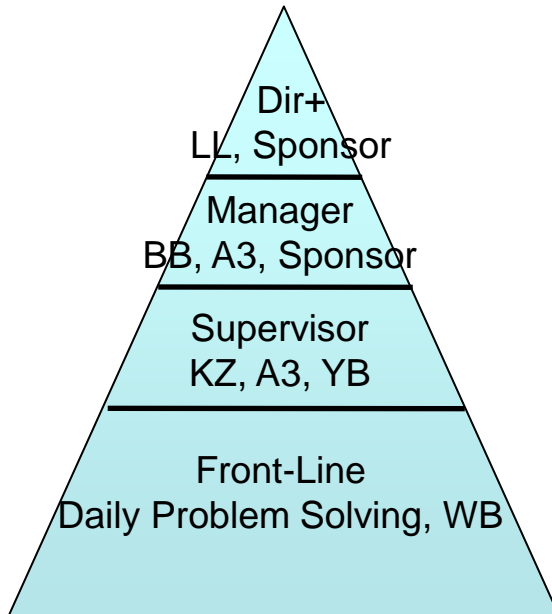
This new index includes all statements that reflect ways employees feel valued to drive a culture of recognition.



# 1. Daily improvement

*How do you create an organization of 38,000 problem solvers?*

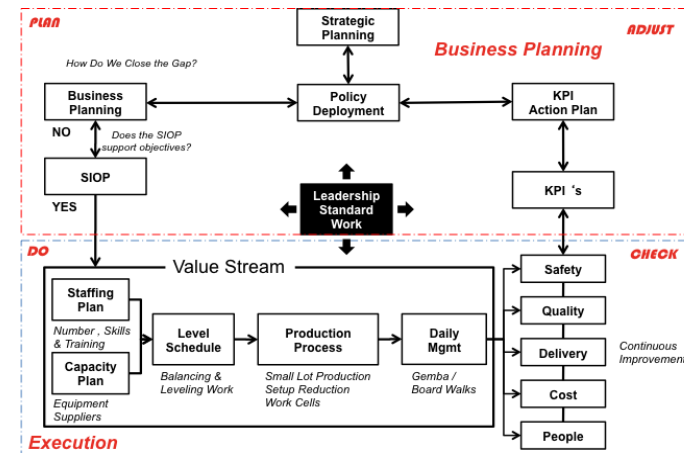
## Investment at Every Level



## Black Belt Capability

- Best of the best
- Full time in role
- 2 year commitment
- Cross-functional leadership opportunities
- Problem-solving & Coaching strengths
- Every site, every function
- Repatriation focus, career development
- Future leaders

## Executive Lean Leadership

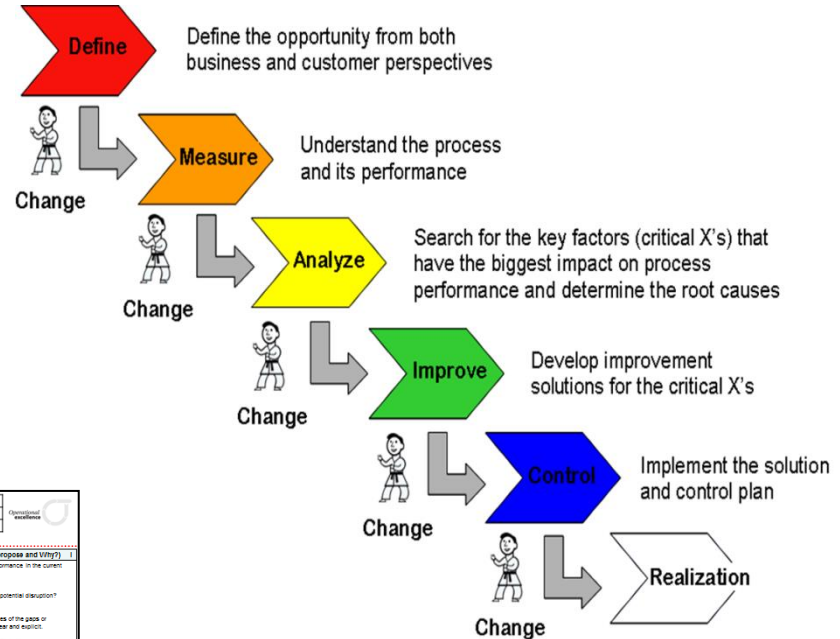


# 2. Method to execute against opportunities

## Kaizen

	Monday	Tuesday	Wednesday	Thursday	Friday
8-9 AM		Finish VSM/Swim Lane mapping - Identify key Metrics that will be improved by the end of event - Complete the Measure requirements in Instantis	Mid-week Review Prep.		Complete Management Presentation - Practice Presentation as a team prior to Report-out - Update Instantis
9-10 AM	Finalize Pre-Event Prep - Define Phase should be complete on Project (Instantis)		Mid-week Touch Point with Project Sponsor, stakeholders or managers	Implement Improvements identified by kaizen Team - Complete any training, document changes, action items or communication - Update Instantis of all improvement activities	
10-11 AM		Identify Waste in current process-TIMWOOD exercise (Brainstorm the Painpoints and associated waste of current process)	Review mid-week touch point with sponsor - address any gaps in Define, Measure and Analyze Phase - Assign tasks for completion of improvement activities - Update Instantis of		Management Report for Kaizen Improvements
11-12 Noon					
Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
1-2 PM	Kaizen Kickoff with Team - Training for Kaizen Team on Project and key tools	Identify potential Improvements to the Process (Brainstorm) Ideas for Improvement to the current process			Celebrate!!
2-3PM	Review Project charter and SIPOC		Implement Improvements identified by kaizen Team - Complete any training, document changes, action items or communication - Document improved future state of new process - Validate actual financial improvements	Development Controls for Improved Process - Controls should include new SOPs, training documents, Visual Metrics and Standard work documents - Develop Kaizen action list for any items not completed during week	
3-4PM	Complete VSM/Swim Lane Mapping of Targeted Process	Prioritize Improvement Activities to meet Team Objectives			
4-5 PM		Finalize list of Improvement Actions to reach goal - Develop Action Plan & Future VSM			
5-6 PM		Update any pictures or documents in Instantis			

## Black Belt

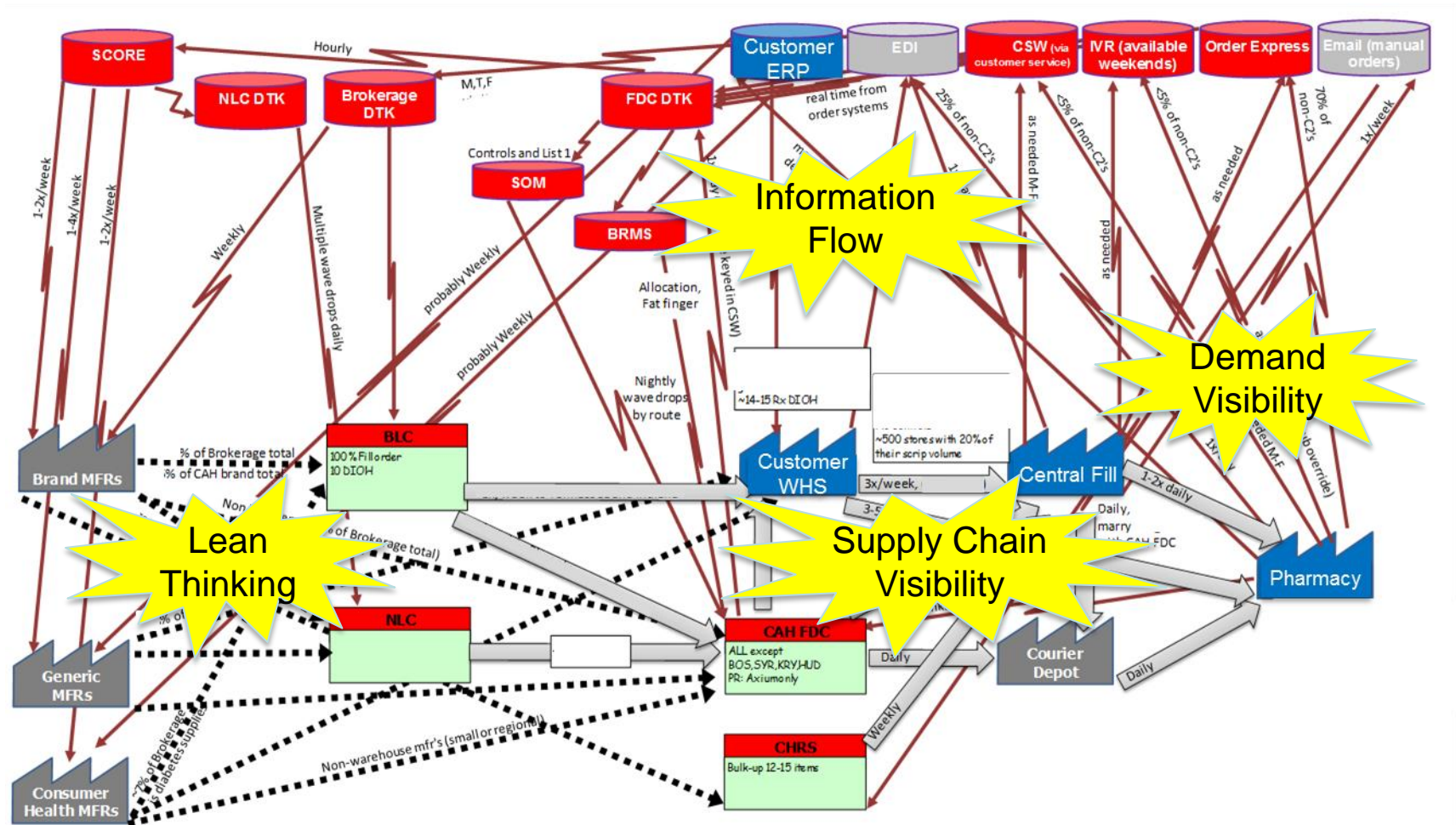


A3

Project Number(s):		Project Sponsor:		Project Leader:		Customer:	
Title							
<p><b>1. Background: (What are you talking about and why?)</b></p> <ul style="list-style-type: none"> <li>What is the problem, the business reason for choosing this issue?</li> <li>What specific performance measure needs to be improved?</li> <li>What is the strategic, operational, tactical, or organizational context of the situation?</li> <li>What are the current conditions?</li> <li>What are the current conditions?</li> </ul>							
<p><b>2. Project Goal: (What specific outcome is required?)</b></p> <ul style="list-style-type: none"> <li>What specific improvement in performance do you need to achieve?</li> <li>Show visually how much, by when, and with what impact.</li> <li>Don't leave a commitment as a goal.</li> <li>What are the current conditions?</li> </ul>							
<p><b>3. Current Conditions: (Where do things stand now?)</b></p> <ul style="list-style-type: none"> <li>What is the problem or need - the gap in performance?</li> <li>What is happening now versus what you want or need to be happening?</li> <li>What are the current conditions?</li> <li>What are the current conditions?</li> <li>What are the current conditions?</li> </ul>							
<p><b>4. Analysis: (Why does the problem or need exist?)</b></p> <ul style="list-style-type: none"> <li>What are the specific causes of the problem or need?</li> <li>What are the specific causes of the problem or need?</li> <li>What are the specific causes of the problem or need?</li> <li>What are the specific causes of the problem or need?</li> <li>What are the specific causes of the problem or need?</li> </ul>							
<p><b>5. Countermeasures/Recommendations: (What do you propose and why?)</b></p> <ul style="list-style-type: none"> <li>What are the options for addressing the problem and improving performance in the current situation?</li> <li>What are the options for addressing the problem and improving performance in the current situation?</li> <li>What are the options for addressing the problem and improving performance in the current situation?</li> <li>What are the options for addressing the problem and improving performance in the current situation?</li> <li>What are the options for addressing the problem and improving performance in the current situation?</li> </ul>							
<p><b>6. Implementation Plan: (How will you implement? 80/20, 50/50)</b></p> <ul style="list-style-type: none"> <li>What will be the main actions and outcomes in the implementation process and in what sequence?</li> <li>What support and resources will be required?</li> <li>What will be the responsibilities for what, when, and how much?</li> <li>How will you measure effectiveness?</li> <li>What will progress be reviewed, and by whom?</li> <li>What will progress be reviewed, and by whom?</li> </ul>							
<p><b>7. Follow-up: (How will you ensure ongoing PDCA?)</b></p> <ul style="list-style-type: none"> <li>How and when will you know if plans have been followed and the actions have had the intended planned and needed?</li> <li>How will you know if you meet your targets?</li> <li>How will you know if you resolve the gap in performance?</li> <li>What related issues or unintended consequences do you anticipate?</li> <li>What consequences can you anticipate?</li> <li>What consequences can you anticipate?</li> </ul>							
<p><b>8. Results Report: (Has primary metric sustained?)</b></p> <ul style="list-style-type: none"> <li>What are the results?</li> <li>What are the results?</li> <li>What are the results?</li> <li>What are the results?</li> <li>What are the results?</li> </ul>							

# 3. Value stream improvement

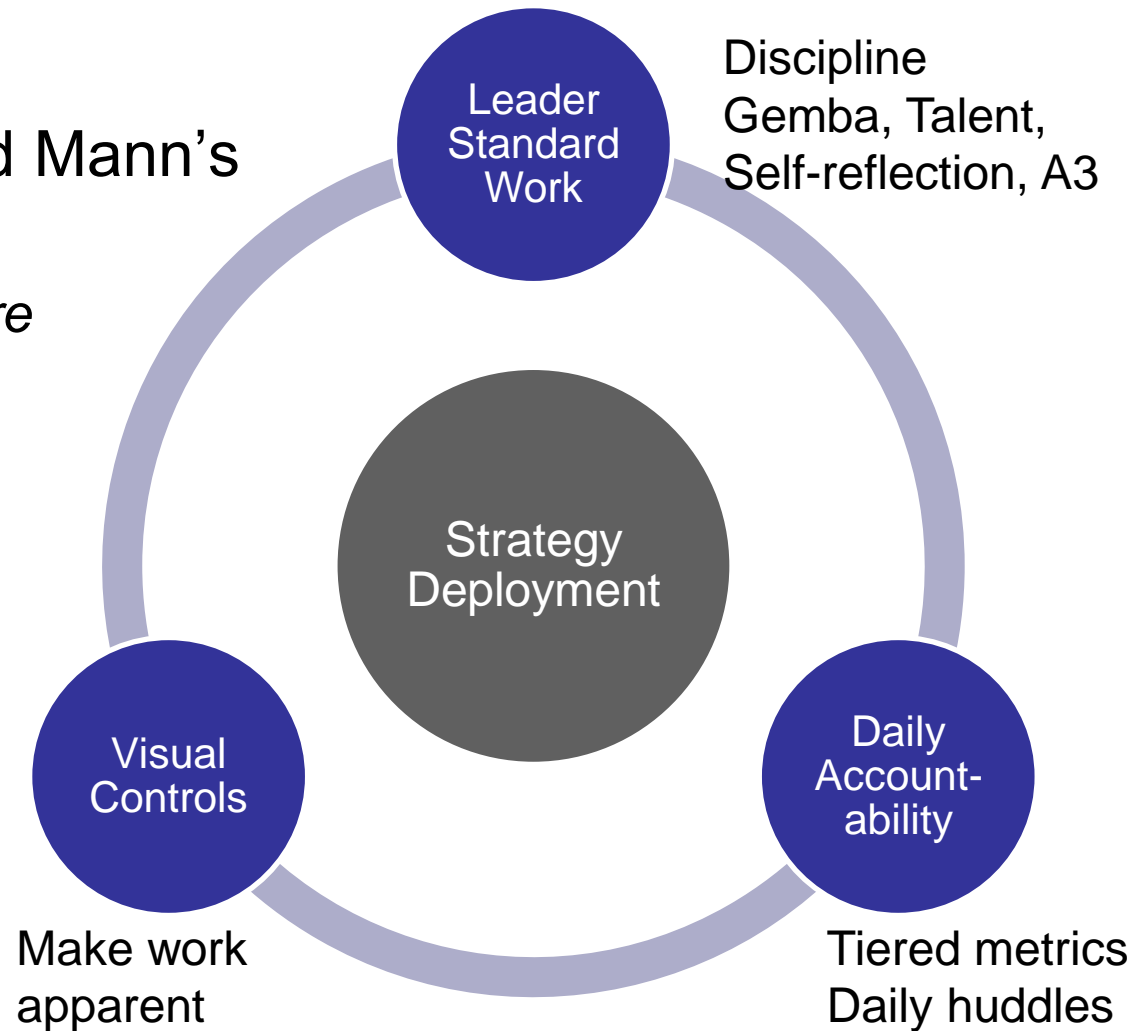
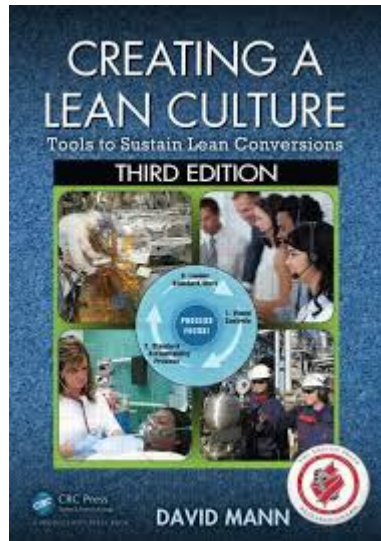
## Pharmaceutical Value Stream



# 4. Integrated management system

Elements – from David Mann's book

*Creating a Lean Culture*





# Thank you!



# Questions

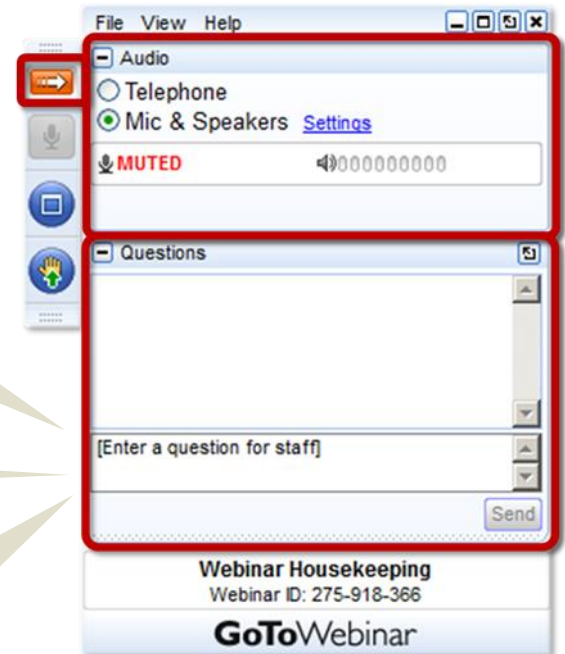


**Todd Thompson**

*How have you handled ....*

*Have you ever encountered ....*

*Would you explain how you've approached ....*



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# Thank you for joining us



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*Join us next month:*

*January 2016 – “The Effectiveness of Blended Learning:  
Overview of Research & Survey Results”*

*Archived presentations and other materials: <http://www.moresteam.com/presentations/>*