



Sustaining Lean Transformation Through Innovation to the Work 革新日常工作管理 促成精益转型生根

Mark Reich
Chief Operating Officer
Lean Enterprise Institute

Welcome to the LEI!



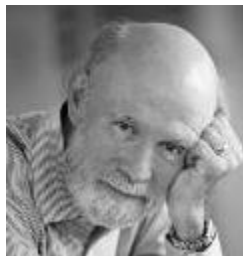
Lean Enterprise Institute
lean.org

美国精益企业研究院

Mission:

*Make things better through
Lean Thinking and Practice*

Founded in 1997 by
Dr. James Womack.
Non-profit education and
research institute based
in Cambridge, MA.



Education (教育)

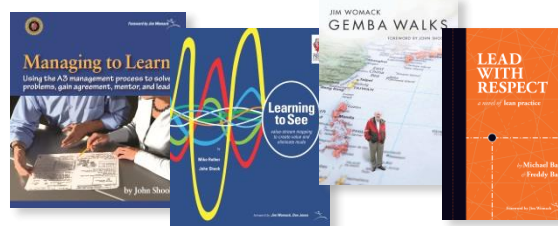
- Public Workshops
- Online Workshops
- On-Site Training
- Co-Learning Partnership
- Extensive list of Faculty and Associates

Website (网站)

www.lean.org

- Over 250,000 members
- Free webinars
- In-depth case studies

Learning Materials(书籍)



Summits, Speaking Engagements and Community Gatherings (峰会)

Fostering Lean Throughout the World

- Lean Global Network
- Healthcare Value Network
- Public Services Value Network



Lean Transformation 精益转型

- Enterprise transformation is the process of an organization shifting its “business” model to a desired future state. 改变做事方式
- A lean transformation requires learning a new way of thinking and acting...重新思考
- **It is not merely a series of steps or solutions but addressing key questions of purpose, process and people.**

回归原点：目的，流程，人

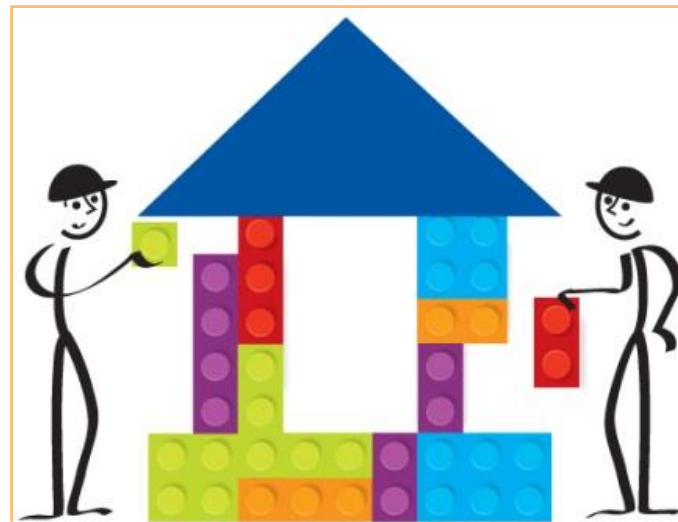
Lean Transformation Framework 框架





The Questions

1. What is the *purpose*, what *value is being created*, or what *problem is being solved*? 目的是什么
2. How is the *work being done* and *improved*? 工作流程
3. What *capabilities are required*? How are they *being developed*? 需要哪些能力？如何培养？
4. What *management system* and *leadership behaviors* exist? 管理体系与**领导者行为**
5. What is the *basic thinking*?
基本**价值观**？



Why do organizations struggle to sustain a transformation? 不成功的原因

Most common reasons we see:

- 1) Spread lean broadly, not deeply 面广但不够深入
- 2) Focus on results/KPI, not building capabilities 缺乏能力构建
- 3) Run as a program, not tied to business need and culture 以个别项目为重点, 没有和企业目的与文化挂钩
 - Business purpose for pursuing lean not well defined 为什么精益?
 - Not focus on improving the value creating work 没有充分注意增值工作



Everyone is not aligned to organizational purpose!

员工对企业目的没有达成共识

Why do organizations struggle to sustain a transformation?

Organization is not aligned to the problem to solve!

组织缺乏共识



- People at all levels – from the CEO to the front line worker - must feel aligned and connected to all levels of the organizational purpose and solving the business problem
上下一致
- The focus should start with and continue to be on improving the value-creating work
集中全力创造价值

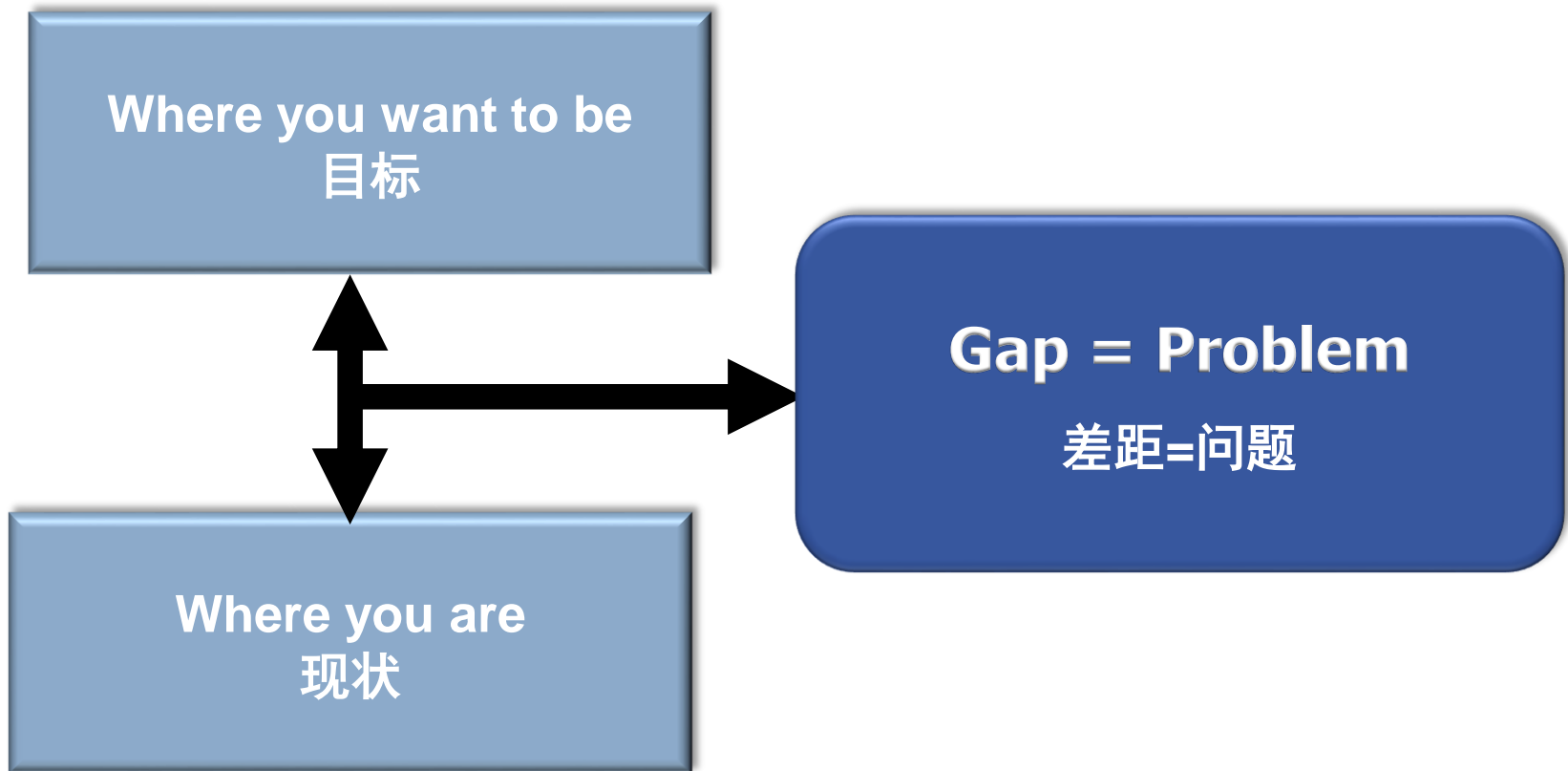
Transformation Question #1 问题1

1. What is our purpose, what value to create or what situational problem are we trying to solve? 目的是什么？

- Have you made the purpose or mission clear to everyone? Does everyone know their value to create? **上下都明白企业目的，并清楚各自的职责**
- Does each person know their specific, situational problem to solve? **每个人每个人都明白各自需要去解决的问题吗？**



What is a Problem? 问题的定义



Toyoda Family to Taiichi
Ohno: 丰田家族对他的要求

“Catch up with the
U.S. auto industry in
three years...!”

三年内赶上美国



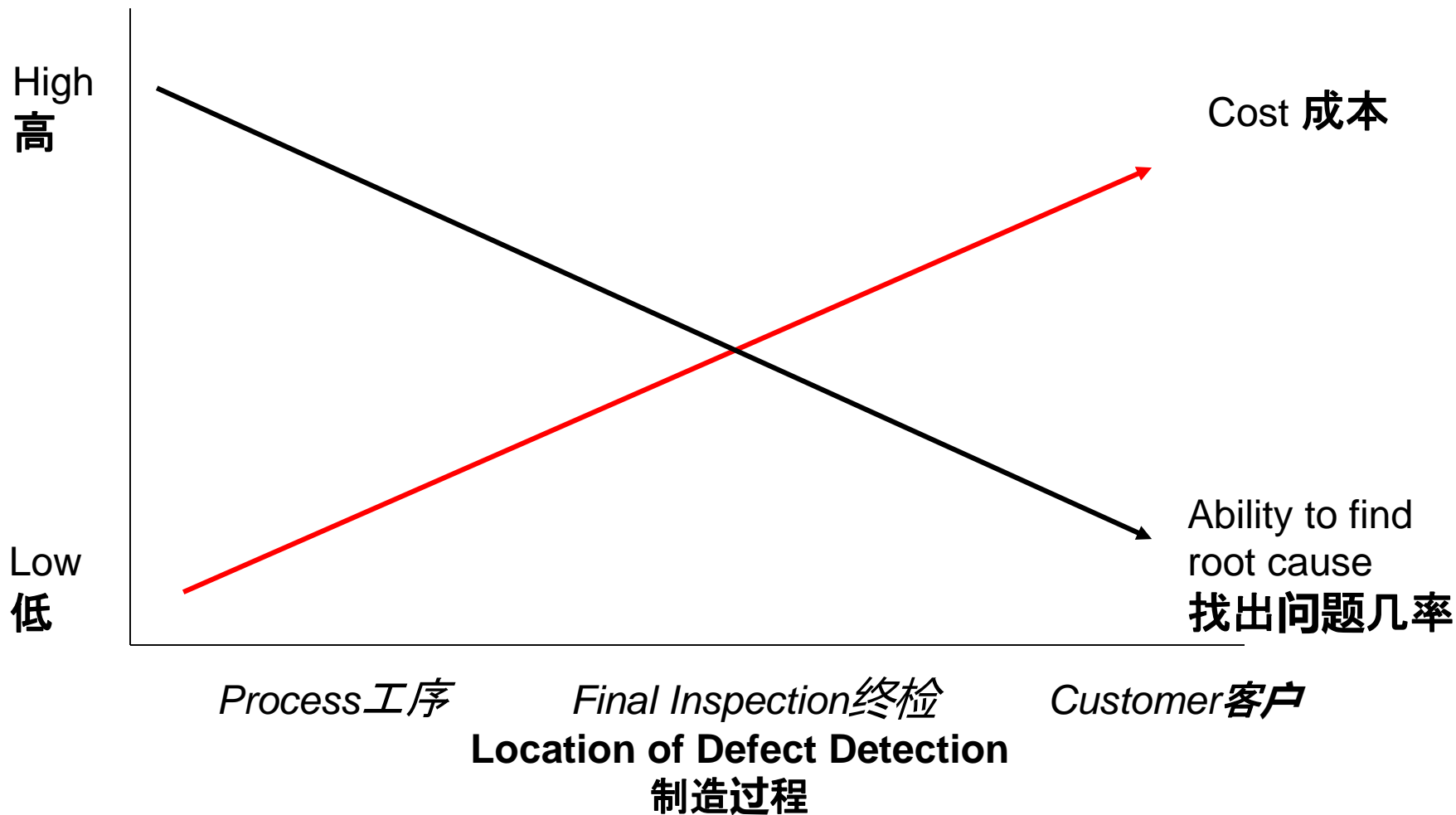


“Catch up with the U.S. auto industry in three years...!”

Toyota's Challenge 丰田的挑战

- Market much smaller than the US, yet diverse
市场比美国小很多, 而且分散
- Productivity 1/10 that of the US
生产效率仅达美国1/10
- No money, banks refused to lend more
缺乏资金
- Poor labor-management relations
劳资关系僵化

Building in Quality 内建质量



Lead Time 交付期

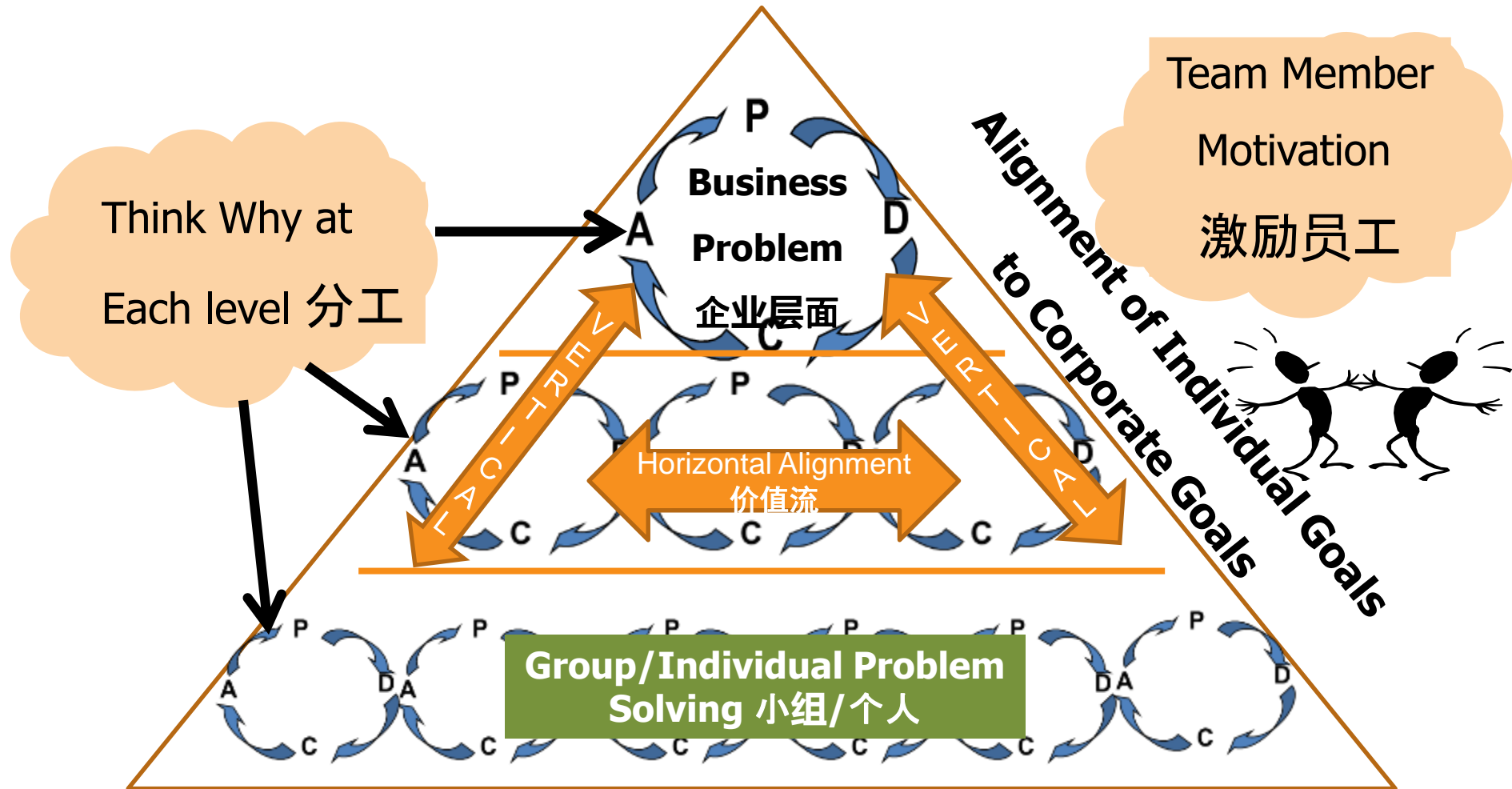
Reduce Lead Time! **缩短交付时间**

- Get each process to produce only what the next process needs when it needs it. **及时生产**
- Orchestrate (control, manage, regulate) operations to get ever closer to this ideal, ever shortening the lead time **协作管理**



“All we’re trying to do is shorten the time line...”
一切努力都为**缩短时间** Taiichi Ohno**大野耐一**

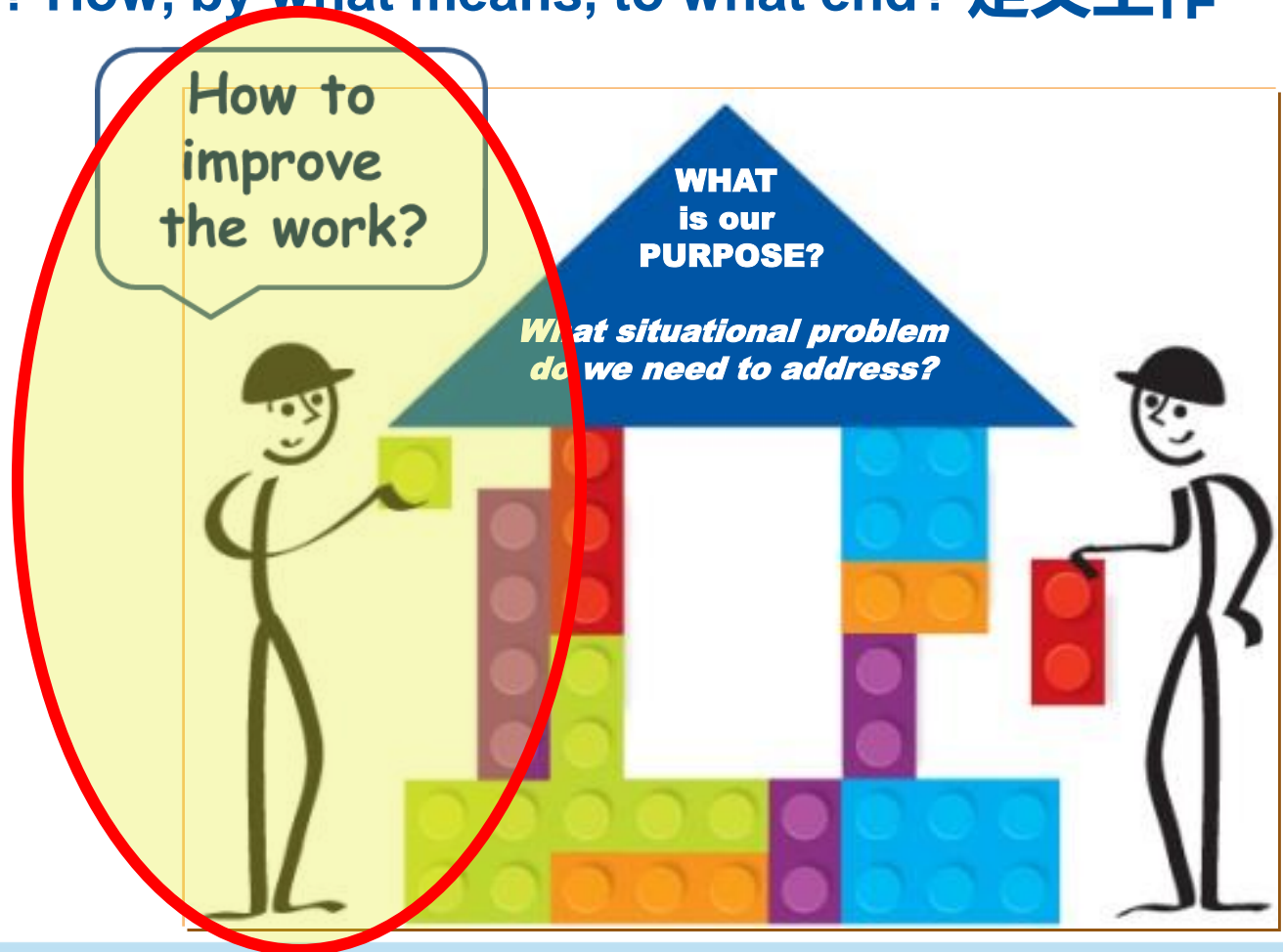
Breaking Down Company Problems and Solving Them at Each Level 分层负责



Transformation Question #2 问题2

2. How are we improving the actual work? 如何改善流程？

- Have you defined the work to be done? Is it being improved? How, by what means, to what end? 定义工作





Lean Enterprise Institute

People Underestimate the Value of Improving the Work 忽视改善的价值

In your company, which of the five dimensions represents the biggest challenge?

284

5个最大挑战

leader behavior 领导行为

39 %

developing capability, developing people 能力构建

19 %

purpose - alignment around the "problem to solve" 达成共识

17 %

basic thinking 价值观

12 %

management system 管理体系

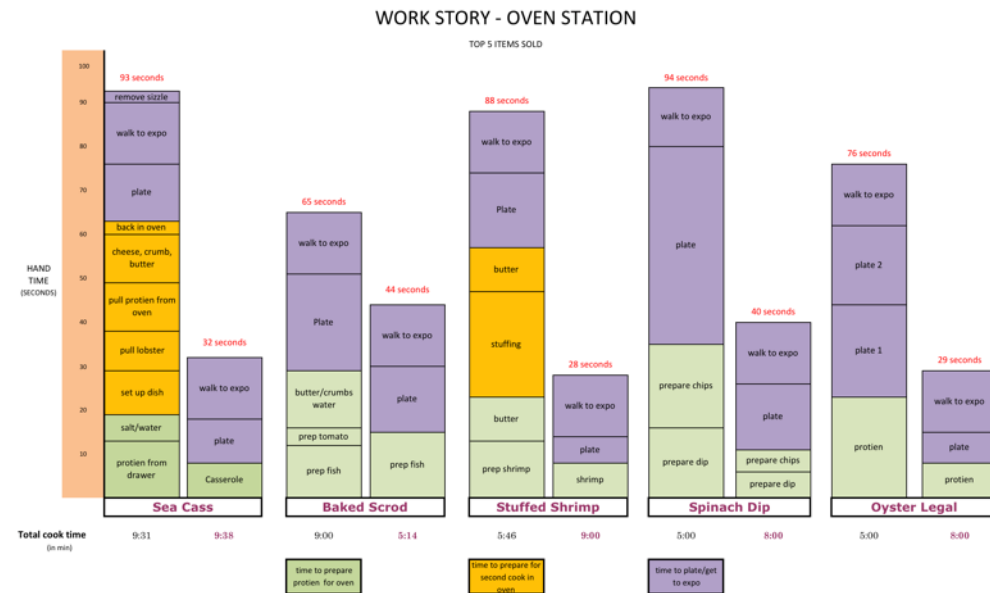
8 %

doing and improving the work 动手改善

4 %

Start by Improving the Value-Creating Work 从改善工作价值开始

“Reduce ‘ticket time’ by 6 minutes...”
减少节拍时间6分钟



The Questions 其他问题

1. What is the *purpose*, what *value is being created*, or what *problem is being solved*?
2. How is the *work being done* and *improved*?
3. What *capabilities are required*? How are they *being developed*? 需要哪些能力?
4. What *management system* and *leadership behaviors* exist? 管理体系
5. What is the *basic thinking*? 价值观



What is the Pathway? 试验途径

1. **Define a model line(inch-wide and mile deep – show what is possible: 示范线)**
 - Address business issues 企业最关心的项目
 - Focus on making the work better for the front-line team members 重点放在帮助一线员工顺利完成任务
2. **Develop capabilities to support line leadership and Team Members 培养班组长能力**
3. **Educate/Engage the leadership in the change and establish management systems to sustain**
培养管理层接受改变思维, 并建立日常管理体系持续发展
 - Hoshin 战略部署(政策方针)
 - Daily Management 日常管理体系



3 Case Studies in Lean Transformation

三个转型案例

- Legal Sea Foods
 - a medium-sized Restaurant chain
 - 一家中型海鲜连锁餐厅
- Lantech
 - medium-size manufacturer
 - 一家中型制造公司
- GE Appliances
 - a large industrial company
 - 一家大型制造公司

Legal Sea Foods 海鲜餐厅



- High-end seafood restaurants on the U.S. East Coast 美东波士顿
- Established in 1950
- Family-owned business 家族企业
- CEO Roger Berkowitz
- 33 total restaurants 33家餐厅
- Became LEI Co-Learning Partner in 2014
LEI 共同学习伙伴

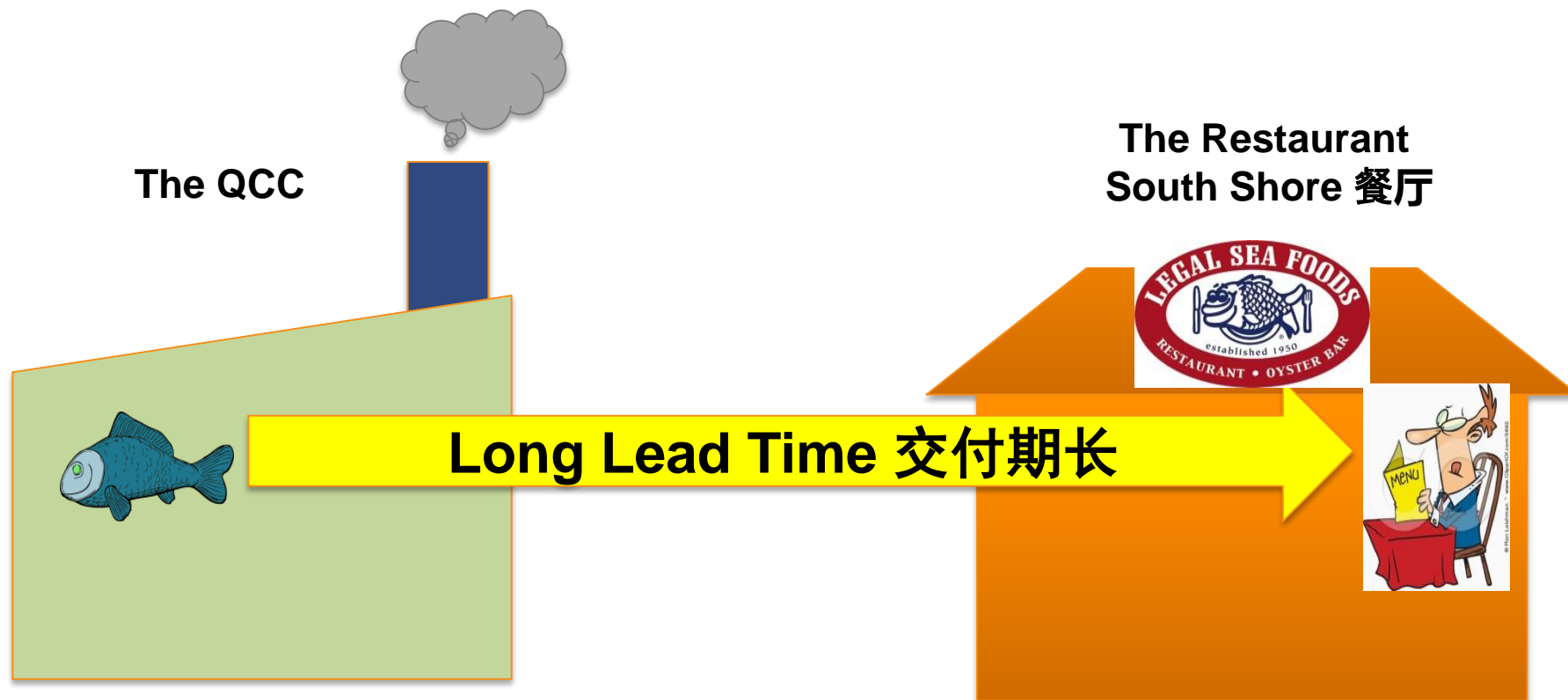


The business problem to solve:

想要解决的问题

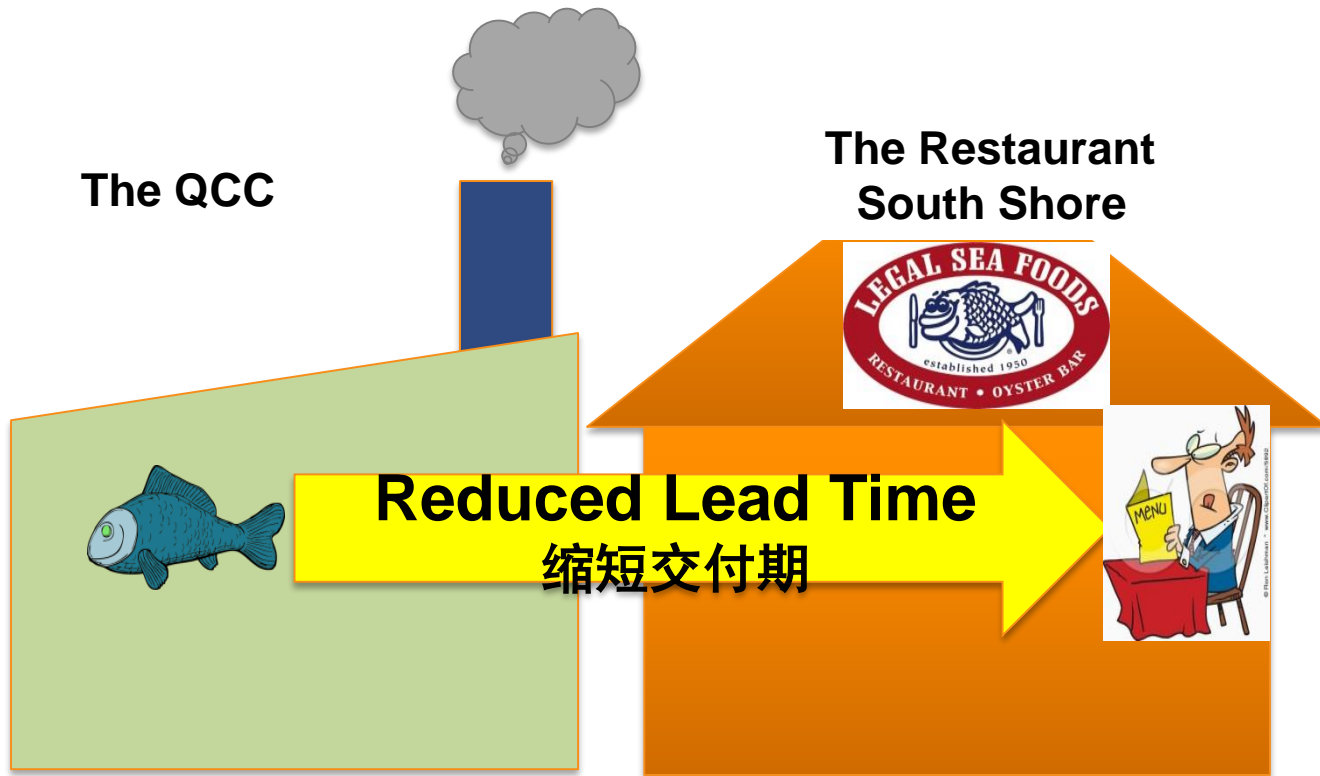
- Macro — Grow and innovate the fresh seafood service business with lean thinking
宏观: 实践精益, 成长业务
- Micro — Apply lean practice to reducing lead time boat to belly (processing to customer serve)
微观: 缩短从捕鱼到客户饱腹的时间 (包括鱼鲜处理, 烹调, 餐厅服务)

What Problem Is Legal Sea Foods Trying to Solve?



**Shrink the Lead Time For the Entire Value Stream
from Processing to Serving
缩短从捕鱼到客户饱腹的时间**

What Problem Is Legal Sea Foods Trying to Solve?



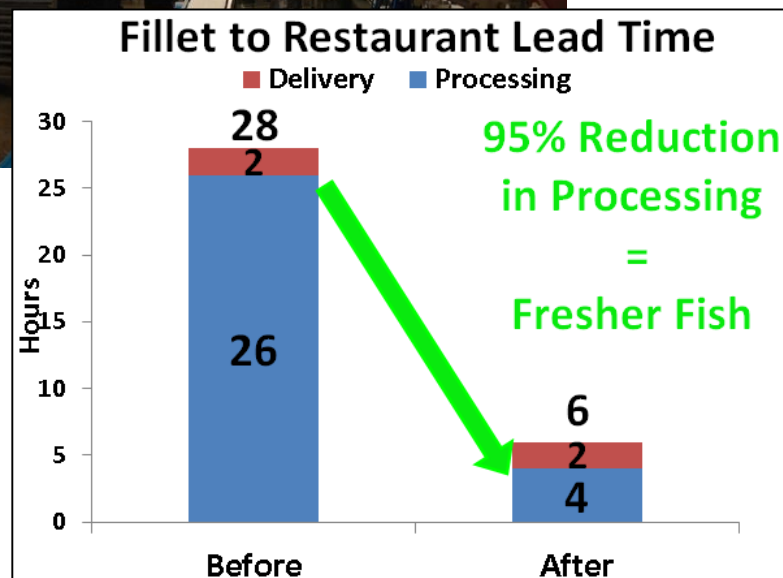
Result = Fresher Fish!

结果=新鲜海鲜

The Model Line - QCC



Before
改善前



鱼鲜处理时间缩短95%

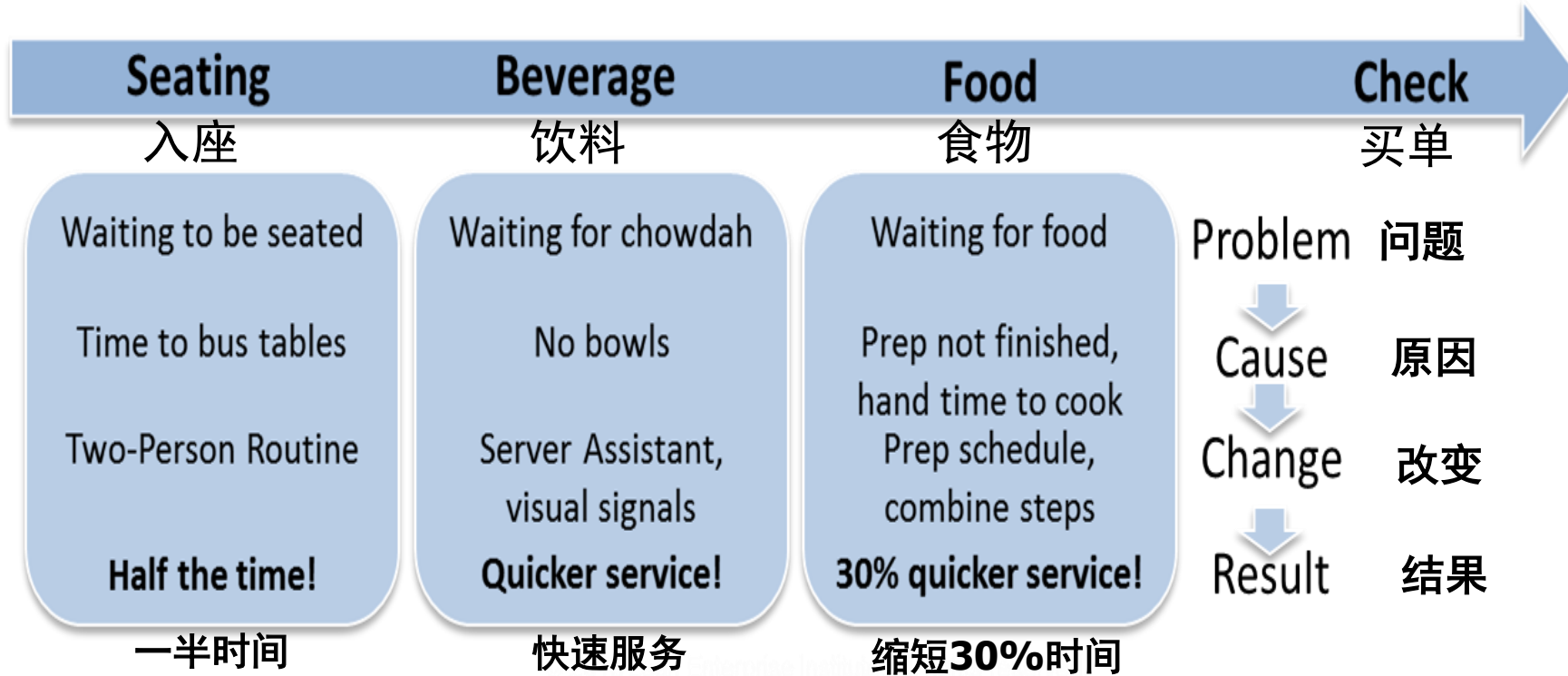
After
改善后



Lean Enterprise Institute



The Model Restaurant – South Shore Improved Guest Experience 示范餐厅

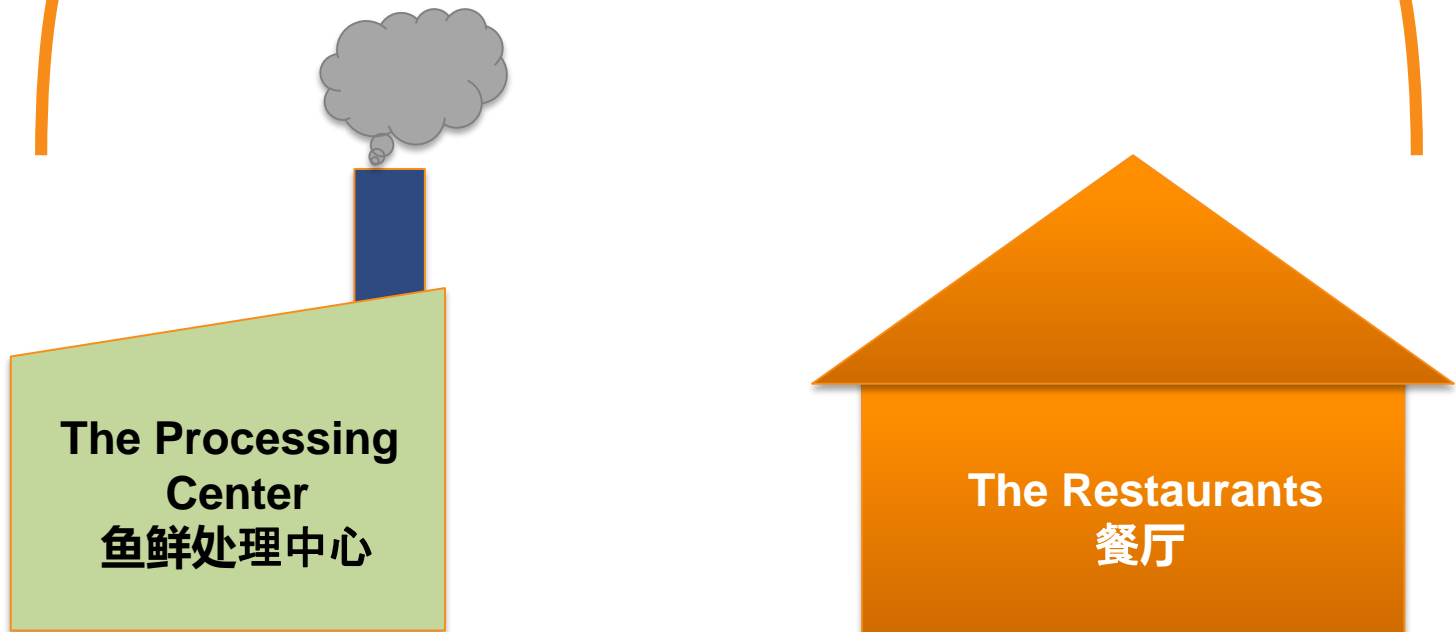


How to sustain these improvements?

如何维持这些成果?

How to Sustain These Improvements?

What is the Management System?
日常管理体系



The Traditional Legal Sea Foods Management Way

“Roger Says”

HQ 总部
“The 2nd Floor”

Legal Sea Foods
Ice Cream!
增加冰激凌

“Popcorn Shrimp!”
虾味爆米花



The 一线
1st Floor

Make the Ice Cream?
Space Available?
Outsource?
外包?

The Processing Center

Aligned?



没有共识

What's the recipe for
Popcorn Shrimp?
如何调制?

The Restaurants

Legal Sea Foods 2016 Hoshin 战略部署

Hoshin Strategic Objectives 战略目标	Team Lead 领导人	Support Team 团队
<p>1) Define and adopt brand proposition(s) to ensure Return of Guests [for restaurant concepts, wholesale and mail order] 定义品牌要素吸收回客</p> <ul style="list-style-type: none"> Understand customer Understand company and concepts Understand competitors and trends 	VP of Marketing 市场副总	Executive Chef VP of Beverages VP of Supply Chain Analytics Manager
<p>2) Strengthen the management system to 加强管理体制</p> <ul style="list-style-type: none"> support alignment, focus and transparency within the company enhance data based decision making 	VP of HR 人事副总	Director of IT Special Projects Mgr. VPs of Legal & Finance
<p>3) Spread learning from the model restaurant to solve problems, clarify standards and process, improve the work, enhance quality and guest experience. Become a pioneer in establishing “lean” behaviors in our restaurant environment 跨团队学习示范餐厅</p>	Executive Chef 主厨	Special Projects Mgr. Director of QA VP of Operations Director of Training
<p>4) Clearly understand the wholesale and retail market to launch successful retail offerings to support the growth of the business and leverage the capacity of the production facilities 了解大宗和零售市场需求，提高销售</p>	Director of Non-Traditional Sales 销售总监	VP of Supply Chain VP of Finance
<p>5) Improve restaurant profitability to ensure long term financial viability of the company by exploring new revenue streams and through targeted cost reductions 增加利润- 新产品+降低成本</p>	VP of Operations 运营副总	VPs of Legal & Finance Executive Chef

Improve Profitability of Legal Seafoods Restaurants through targeted cost reductions

Maintain

降低成本维持利润

Background

- LSF restaurants have a 10.7% operating margin (2016) and the target is to achieve 15% in 3 years
- Harborside, Framingham and South Shore are the target restaurants for the cost reduction activities



Current Situation



Target Situation

- At a minimum, achieve the revenue and operating margin projected in the 2017 budget

	Harborside	South Shore Place	Framingham
Revenue			
Cost			
Operating Profit			
Operating Margin (%)			

- Develop employee problem solving capability to identify and address cost and revenue issues

Analysis

- Labor costs increasing at a greater pace (6%+) compared to revenue growth of 3% CAGR

- Within F&B, Dry Goods and Produce cost up by 13% and 6.6% while Fish costs have remained stable
- Admin and operating expenses have gone up around 7% and 3.5% at Harborside and South shore

Learning Activities to Identify Root Causes

Costs	Potential Causes	What do we need to learn?	How to structure the learning?
Labor	<p>1) Unnecessary costs incurred due to excess labor (waste) during times of low customer demand and inadequate labor (overtime) during high demand</p> <p>2) Regulations regarding minimum wage and reclassification of AKMs/ARMs from salary to hourly employees</p>	<p>Do we have the optimal number of employees to meet customer demand and provide great guest experience?</p>	<p>The graph indicates that labor costs are generally 10% of revenue, but they fluctuate based on customer demand. During high demand, labor costs increase, and during low demand, they decrease.</p>
Food and Beverage	<p>1) Food and Beverage wastage</p> <p>2) Increase in cost of raw materials</p> <p>3) Complexity in product mix and high inventory costs</p>	<p>1) What food items are the most wasted?</p> <p>2) Are there opportunities for working with suppliers to reduce raw material costs?</p> <p>3) Learn about the complexity of the menu and inventory levels?</p>	<p>1) Analyze the food and beverage variance reports</p> <p>2) TBD</p> <p>3) Investigate complexity of menu and current inventory levels</p>
Admin and Operating Expense	<p>1) Repair and Maintenance (R&M) is requested on the same part by multiple staff members around the same time</p> <p>2) Frequent breakdown of repaired parts and no productive maintenance</p>	<p>1) TBD</p> <p>2) TBD</p>	<p>implementing a product called 'Service Channels' to better track R&M with better analytics and reporting capabilities</p>

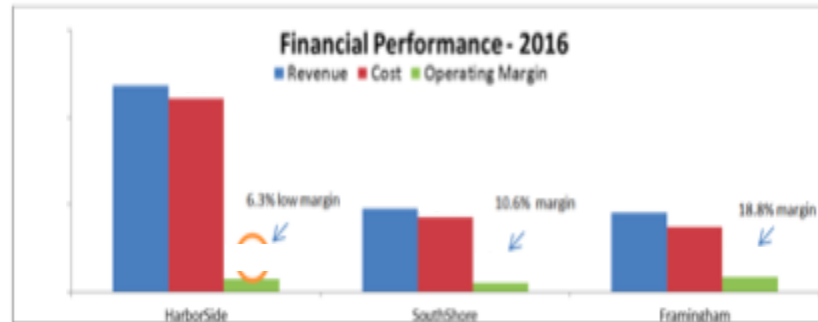
Learning Plan Timeline

Learning Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Analyze and experiment with staffing levels		X	X	X								
F&B wastage and complexity in product mix			X	X								
Repair Maintenance through Service Channels			X									

Breaking Down the Problem 分解问题

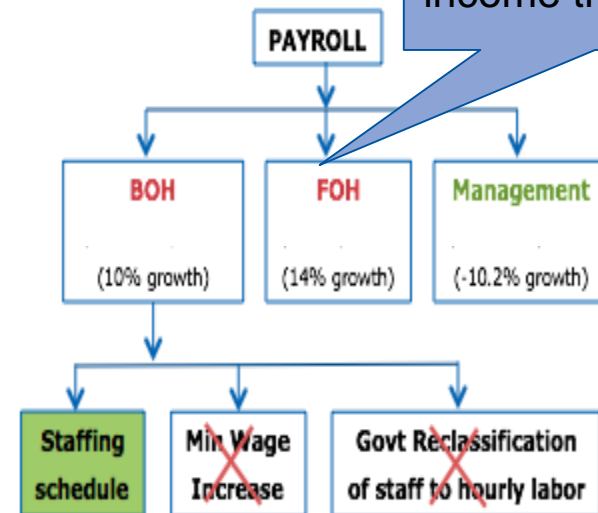
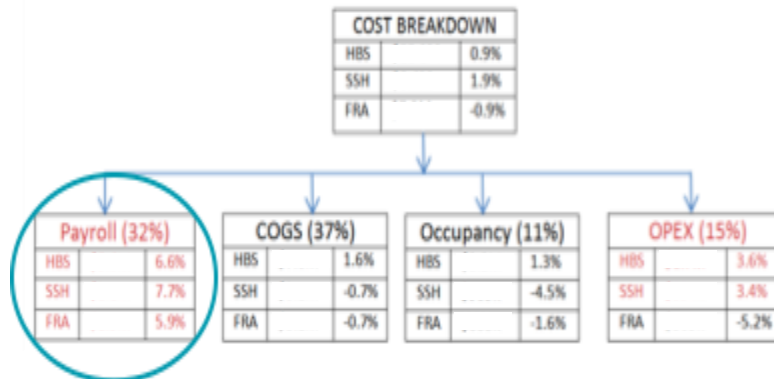
Background

- LSF restaurants have a 10.7% operating margin (2016) and the target is to achieve 15% in 3 years
- Harborside, Framingham and South Shore are the target restaurants for the cost reduction activity



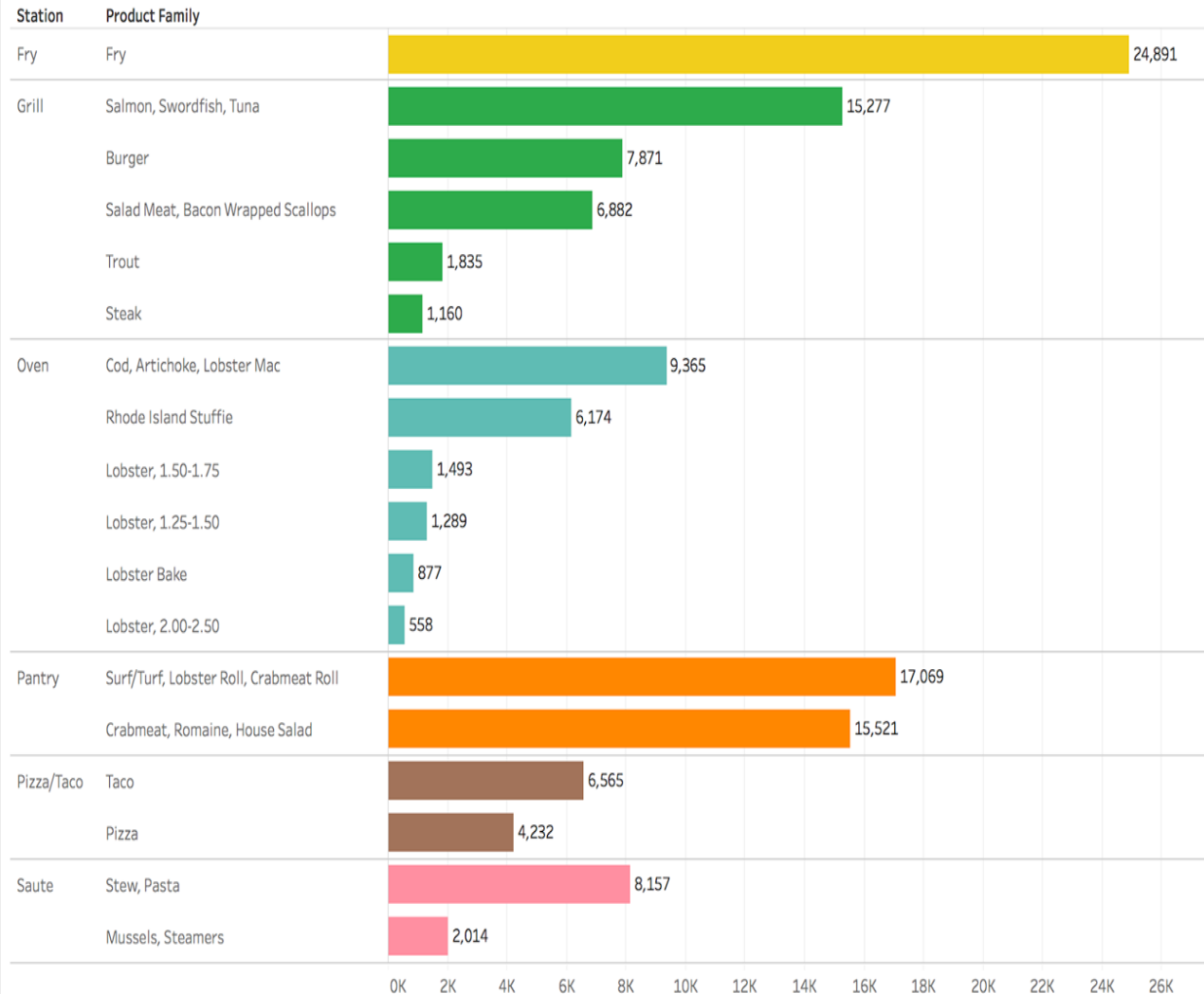
Key fact: FOH employees (servers) receive most of their income through tips.

Current Situation



Station Overviews

Product Family_Aggregate



Station

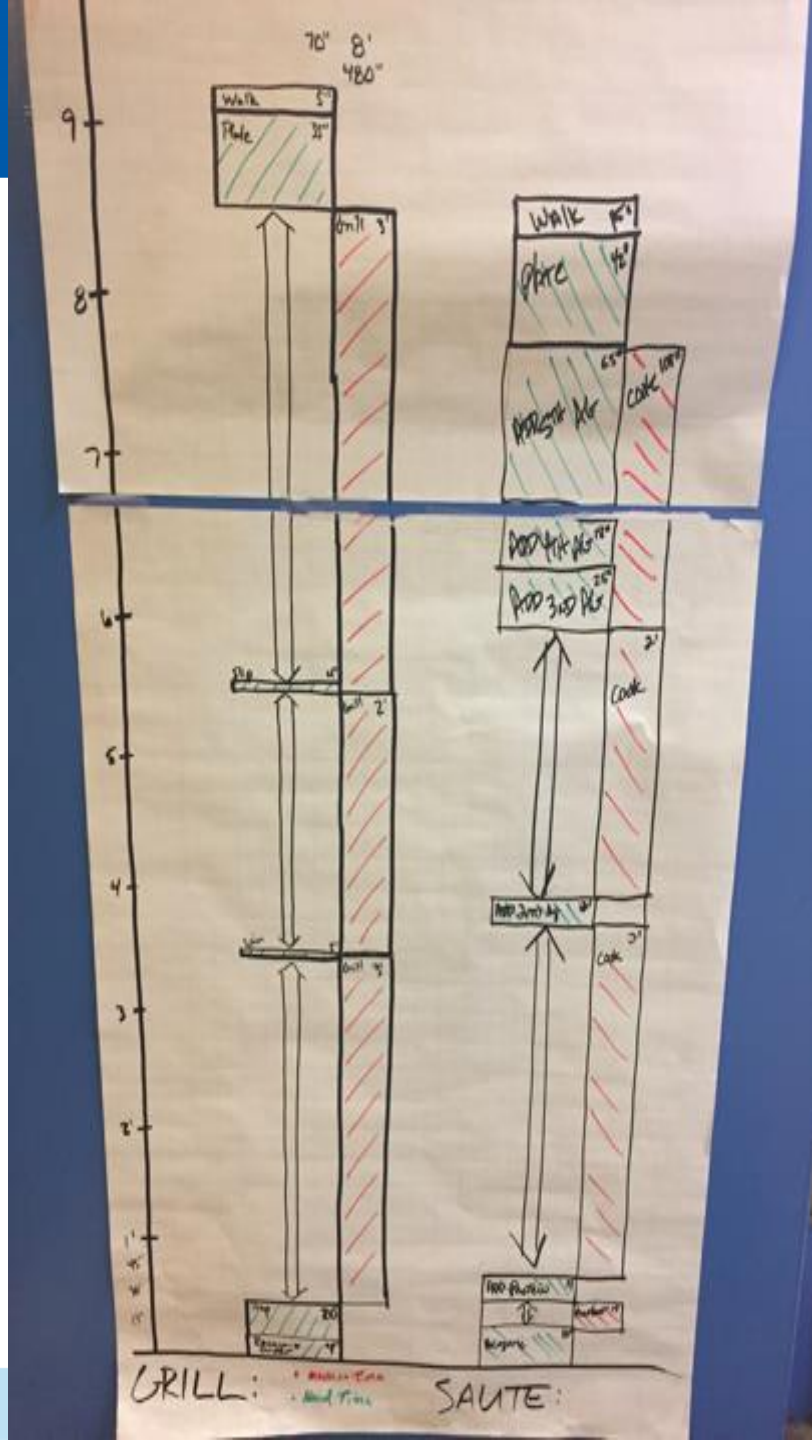


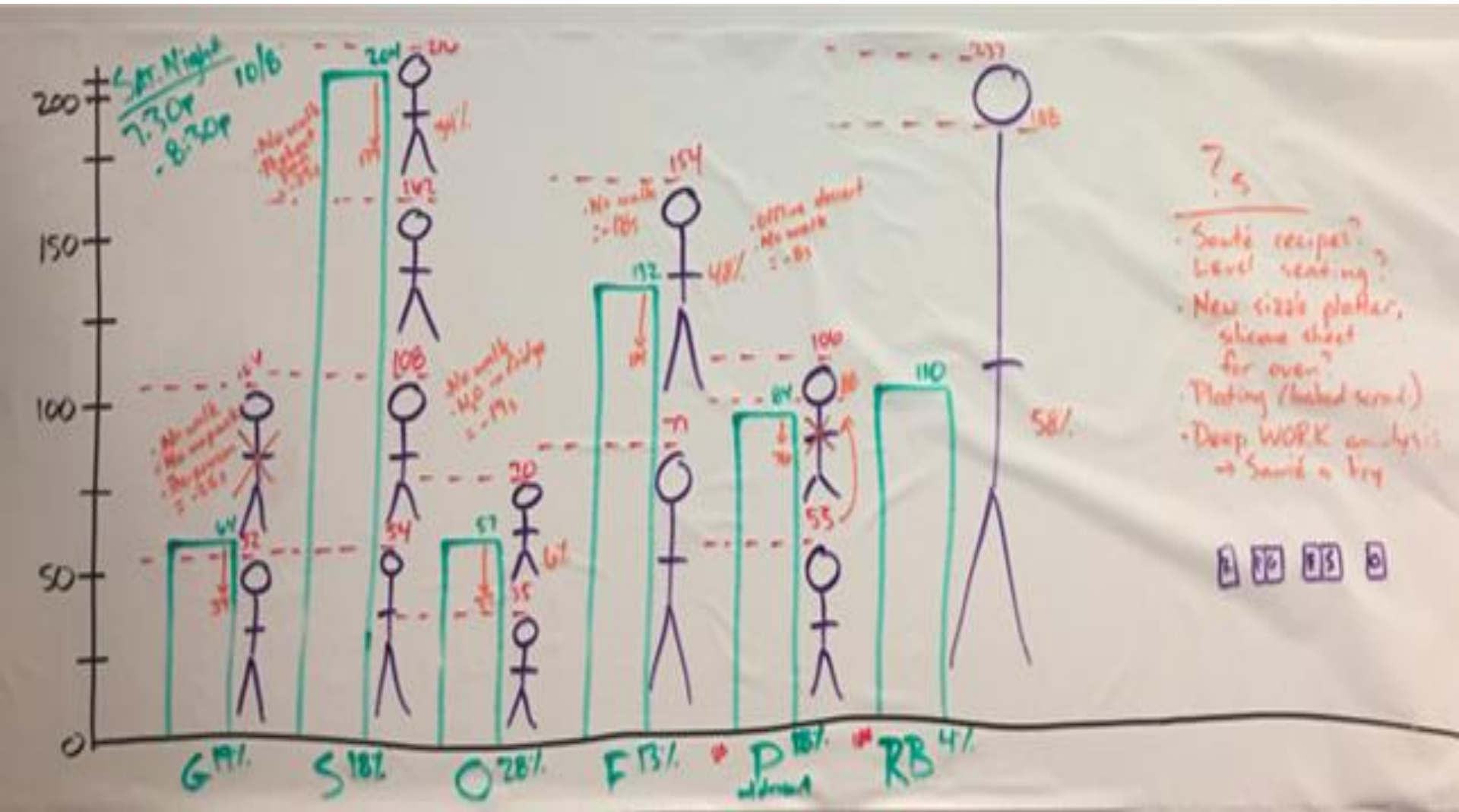
Transactions

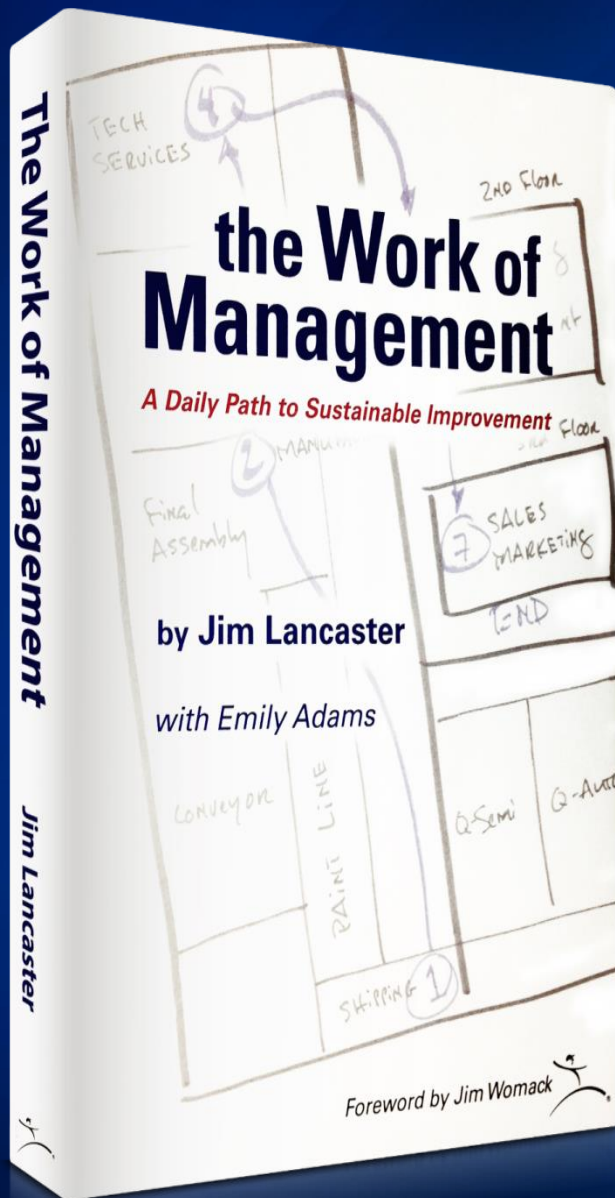


Start with the WORK!!

动手干







The Work of Management

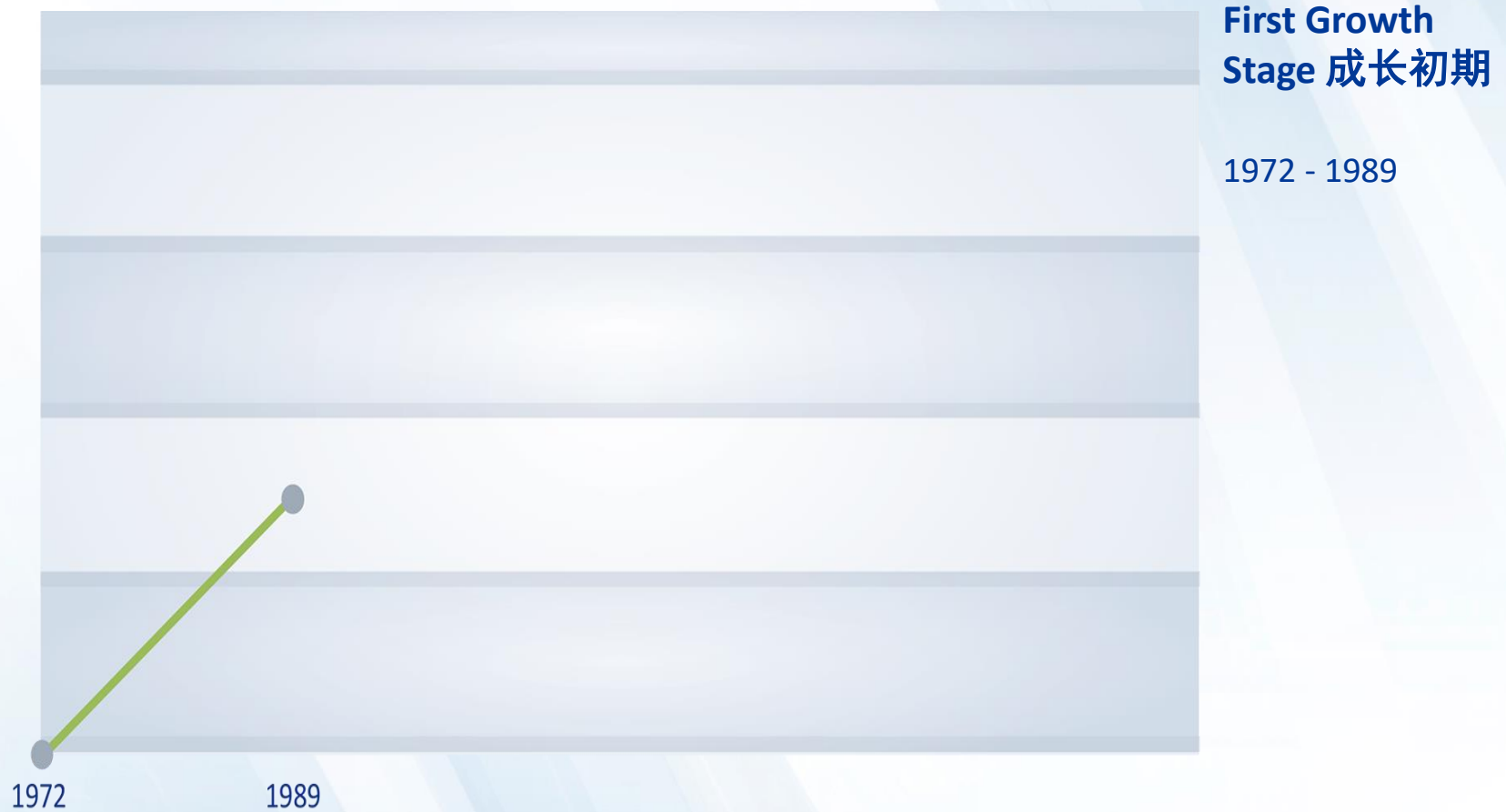
A Daily Path to Sustainable Improvement

日常工作管理体系

By Jim Lancaster

Lantech®

The Journey Lantech精益旅程



Lantech[®]

The Journey Lantech精益旅程



First growth stage went through to 1989 then leveled through 1992.

1989 - 1992

Lantech®

The Journey

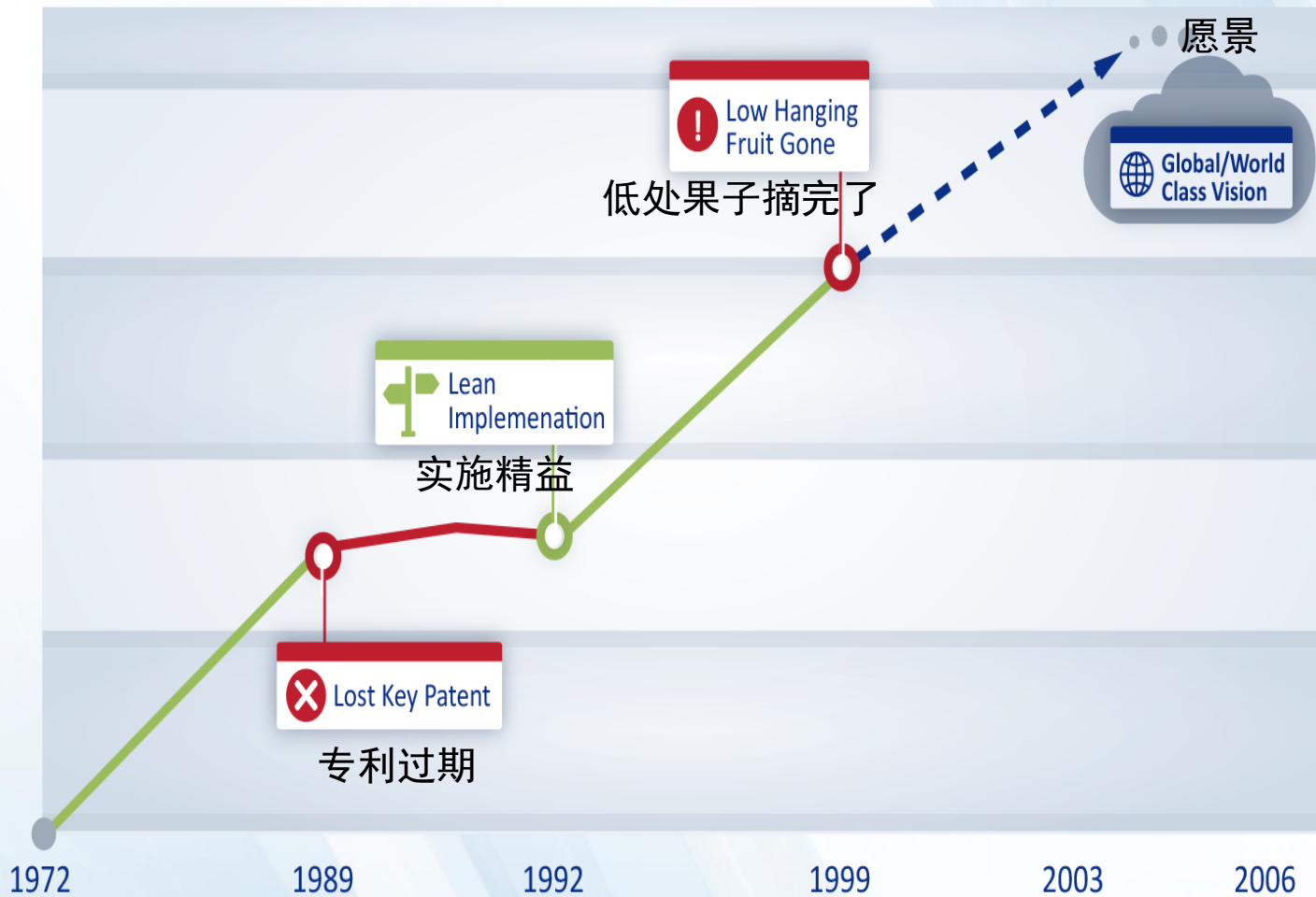
Lantech精益旅程



Lean facilitated growth still happening but it was not the same.

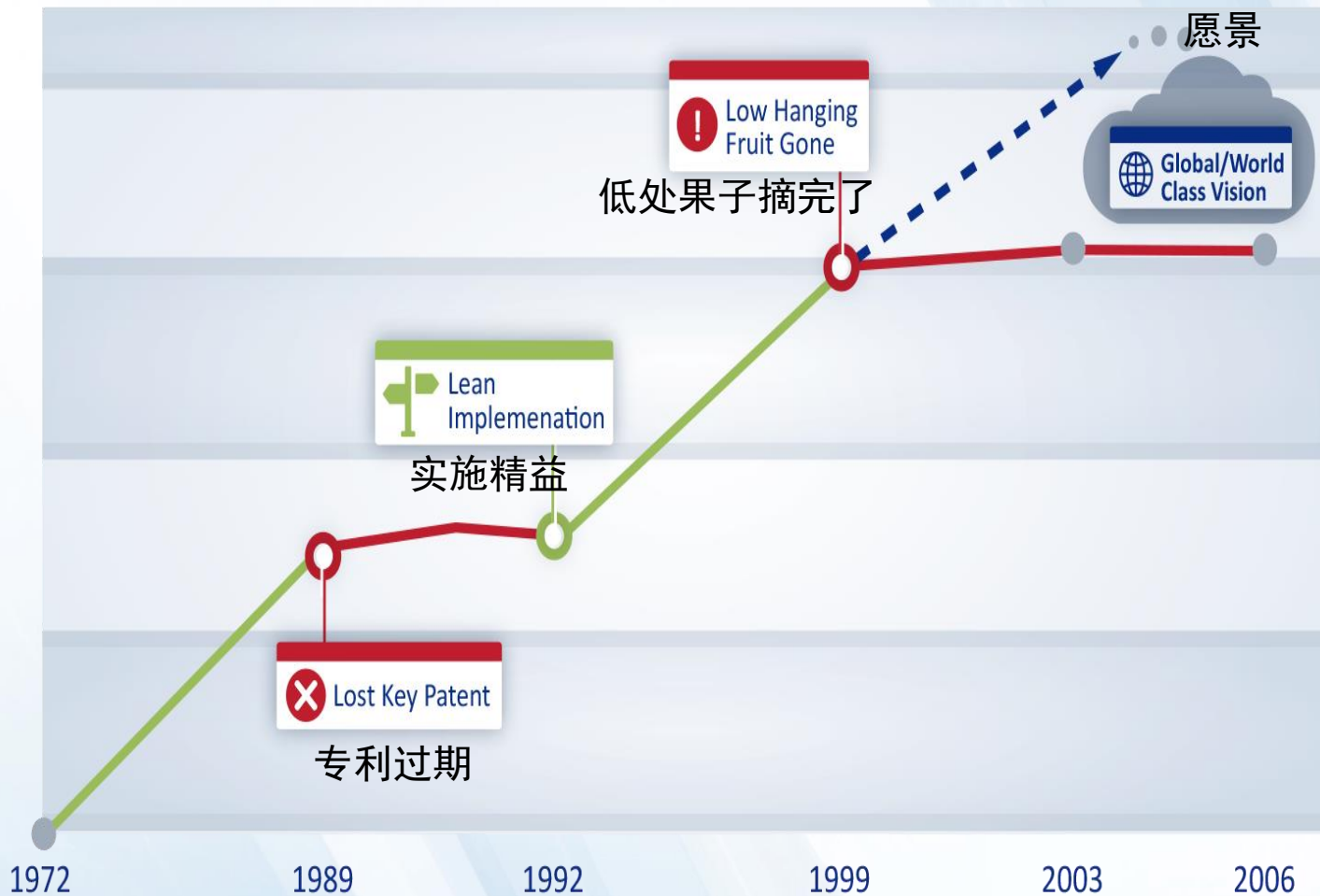
1992 - 1999

The Journey Lantech精益旅程



The Journey

Lantech精益旅程



It's About the Work!! 工作本质

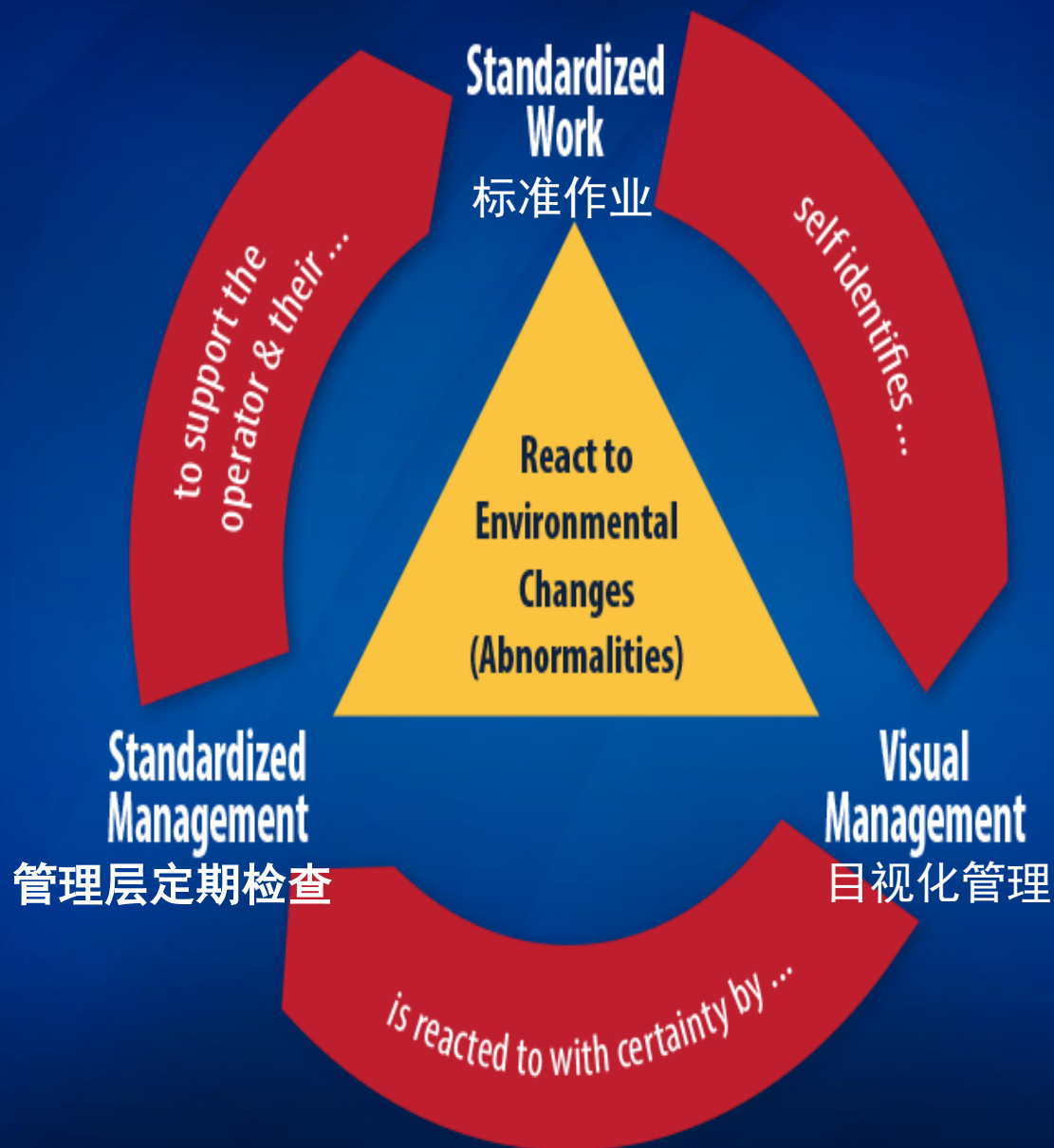


⇒ LEARNING to *SEE* it
学习观察

⇒ LEARNING to *DESIGN* it
学习设计

⇒ LEARNING to *MANAGE* it
学习管理

金三角



WAR Management Cycle(DMI)

每天行事历



A system that:

Holds gains through management's quick response, allowing for improvement from the freed up time from fire fighting.

**领导层快速反应可以帮助团队巩固改善成果；
节省的救火时间与精力可以用来持续改善**

Lantech[®]

Results in

Cross functional support solved every morning.

Priorities adjusted daily cross functionally.

Clarity of Responsibility – who decides what.

*导致：跨团队每天早上一起解决问题，决定当天的工作优先排序，
厘清责任，谁要干什么？*

GE Transformation Timeline

转型时间表

2008 – Business Crisis
企业危机

2009 – Lean Model Line
示范线

2010 – Re-Shoring
海外业务回归

2011 – Little Big Room

2012 – Launch 5 new lines 5条新线

2013 – Launch 4 new lines 4条新线

2014 – Hoshin 战略部署

2015 – Project Phoenix 凤凰项目

2016 – Back to Basics 回归原点

Continuous Learning & Improvement
持续学习和改善

**Great
care for
the
design
of each
job**

注重产品设计



**Simple
简单**

**Easy to
do right
容易做对**

**Hard to
do wrong
不容易做错**

**Easy to
spot
problems
容易看见问题**

Continued Improvement in Processes 持续改善

...2016 P3 Dishwasher Line P3 洗碗机生产线



Before 改善前

- Batch production 批量生产
- Low flexibility – 3 skus per day 柔性低，一天生产三个型号
- Complexity hard to manage 太过复杂
- Waste hard to see 看不见浪费
- ADC in stock = 81% ADC库存81%
- Assembly Yield = 80% 组装线效率 80%

After 改善后

- 1x1 production 单件流
- Every sku every day 每天生产每个型号
- System to manage the complexity 建立管理体系
- Hidden waste exposed - reduced 5 parts 挖掘浪费-减少5个零件
- ADC in stock = 93% ADC库存 93%
- Assembly Yield = 95% 组装线效率 95%
- \$1.0M Annual Savings!!! 年度节省100万美元

Breaking Down Company Problems and Solving Them at Each Level 分层负责

