The Way to Lean
Michael Ballé, Ph.D.
Housekeeping

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- To adjust the sound, use the volume control on the console or on your computer
- Ask questions at any time during the presentation by using the question box on your console. We will answer them during the Q&A part of the webinar.
Meet Today’s Presenter

Michael Ballé

▪ Lean management practitioner and researcher for 20 years
▪ Coaches sr. execs in lean culture & behavior change
▪ Co-author Lead With Respect, The Lean Manager, The Gold Mine
▪ PhD from the Sorbonne; Social Sciences & Knowledge Sciences

@Michael_Balle
POINT OF CAUSE?

WHY? WHY? WHY? WHY?
Go and see the gemba and kaizen
What is our business challenge?
Sales, Cash, CapEx, Profit

- Late deliveries, large inventories: no cash coming in, lots of cash sunk in working capital
- Innovative product which is hard to price, quality issues add unnecessary costs

<table>
<thead>
<tr>
<th>Go and see and face your problems</th>
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<tbody>
<tr>
<td>SALES</td>
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<tr>
<td>Follow your customers</td>
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<tr>
<td>CASH</td>
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<td>Accelerate your flows</td>
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<td>PROFIT</td>
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<td>Develop your people</td>
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<td>CAP EX</td>
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<td>Be very good at a few things</td>
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Develop long-term partnerships
Let’s go to the gemba and learn to see by applying the lean principles through the lean tools.
How do we deliver to customers?

Takt Time = \frac{\text{Available Daily Production Time}}{\text{Daily Customer Demand}}

Number of Operators = \frac{\text{Total Work Content}}{\text{Takt Time}}
Which means understanding the tools

“5S?” asked Amy.
“Some other Japanese gimmick. Let me see, ‘sort and eliminate,’” said Phil.
“Seiri,” confirmed Dad.
“Order.”
“Seiton.”
“Clean.”
“Seiso.”
“Maintain.”
“Seiketsu.”
“And discipline.”
“Shitsuke.”

5S is about making it easy for operators to reach standard work (job elements, basic skills, deep knowledge) by learning to organize their own workspace.
And leading kaizen firsthand
Lead kaizen yourself to make work easier and to better understand the deeper problems

1. What is the improvement potential?
2. Study current method
3. Come up with new ideas
4. Plan how to test new ideas and convince others
5. Try and measure
6. Evaluate new method

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<thead>
<tr>
<th>Mechanism</th>
<th>Before</th>
<th>After</th>
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<tr>
<td>STR mechanism</td>
<td>Parts</td>
<td>40/day</td>
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<td>People</td>
<td>6</td>
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<td>GST-1, GST-2 and DG mechanisms</td>
<td>Parts</td>
<td>70/day</td>
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<td>People</td>
<td>12</td>
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To grasp lean thinking
When we produce value we also generate waste for customers, employees, suppliers, neighbors.

Source: Toyota Motor Company
Lean thinking: the problem
Lean thinking: the countermeasure

1. Improve customer satisfaction every day

2. Improve built-in quality: Get quality right every time first time

3. Improve Just-in-time: reduce lead-time, reduce stagnation time

4. Reach target cycle time by deepening standard work, encouraging kaizen and leveraging productivity

People involvement, People engagement
Kaizen: they learn, you learn

Through kaizen, frontline teams learn to do something better

When the CEO changes his or her mind, the entire company changes
Build the management system
Every one, everywhere, every day
What management system?
**JOB = WORK (with standards) + KAIZEN**

- **Standard work** is the key to customer outcomes, quality, flexibility, productivity and employee self confidence.
- **Engagement** in problem solving is the key to maintaining standards.
- **Involvement** with one’s team in kaizen activities is the key to improving standards.

<table>
<thead>
<tr>
<th></th>
<th>Team Member</th>
<th>Team Leader</th>
<th>Supervisor</th>
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<tr>
<td>Safety</td>
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<td>Standardized work</td>
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<td>Remarking abnormalities</td>
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<td>Kaizen to eliminate waste in the cycle time</td>
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<td>Eliminate variation in the flow of work</td>
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<td>Rebalancing the work flow</td>
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To develop people?
A green tomato

**T-development Model**

**Leadership:** Solving problems with upstream and downstream colleagues

**Expertise:** Better understanding the fundamentals of the job, and knowing how to deal correctly with specific cases
Pull system
There's no lean without kanban
Managers no longer manage the process, they manage people.
Problem-based learning
Respect for people’s experience and commitment to mutual trust

- In adult learning, recognizing experience is essential (understanding does not mean agreeing)
- By having people fully solve problems and then discussing, we build understanding and mutual trust
And teamwork: individual and team performance

The issue is not what every one already knows in common

But sharing what only one person knows with the rest of the team

<table>
<thead>
<tr>
<th>Title</th>
<th>DATE</th>
<th>Supervisor</th>
<th>Owner</th>
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<tbody>
<tr>
<td>Problem description</td>
<td>Root-cause analysis</td>
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<td>Grasp the situation</td>
<td>Countermeasure plan</td>
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<td>Execution plan</td>
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<td>checking results</td>
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<td>Target</td>
<td>Followup and learning points</td>
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And clear direction
Direction, not destination

- Recognize the company’s challenges

- Clearly express directions for improvement

- So that every one can contribute by knowing whether they’re moving forward or backward
Management lessons from Taiichi Ohno

Make it easy for employees to follow standard work

Management meetings, central systems, boardroom decisions

Customer, product, value-adding employees

For Mr. Michael Balle

Kaiizen Equals Getting Closer To the Final Process

「改善は最終工程に近づくこと」

Takashi Kuroda

2015.10.2
How can small-step kaizen affect large scale improvement?
Who is in the bus really matters

One-by-one change

Manager

Group Leader

Team & Team Leader

Kaizen

Kaizen

Kaizen

Kaizen

Kaizen

Kaizen
Grow leaders

THE GOLD MINE Trilogy Study Guide
Linking gemba kaizen to competitive advantage, through leadership development
True innovation rests on capabilities

- Visualizing processes to reveal problems
- Management must jump in to develop organizational capabilities
- Which leads to better doing the right thing
- and doing new things successfully
Involves a radical new role for management
Middle management: from decide and staff to instruct and improve

TOP LEADERSHIP
CHALLENGE

TEAM & TEAM LEADER

GROUP LEADER

MANAGER

GEMBA RESPONS E
Define success

- Visual management should orient staff towards the right behavior
- By showing targets (intended success)
- And the gap with real-time conditions
- So people can express the obstacles that occur in their way
- And take responsibility for trying countermeasures

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<tr>
<th>HOUR</th>
<th>TARGET</th>
<th>ACTUAL</th>
<th>COMMENTS</th>
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Involve all in their own performance: taking responsibility to find countermeasures to bridge the gap
The role of leaders is to develop more leaders
Leadership development as a hard skill
At all levels

- Individual problem solving
- Team kaizen
- Intense collaboration across boundaries
- Competency/Process improvement
- Capability development
- Innovation
Better observation, better discussion
We hope to support you on your journey

- With a study group
- You can discuss the tools and the ideas in context
- Agree on what it means for you
- Compare with what we had in mind
- And discuss further to stimulate learning
- Need help setting up a learning group? Contact webmaster@lean.org
Now available on Lean.org

The Gold Mine Trilogy with Study Guide

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Lean.org/bookstore
Ask the Gemba Coach!

A weekly column with observations & answers from the shop or office “gemba” by Michael Ballé.

Ask your question at lean.org/balle
Questions & Answers

with

Michael Ballé, PhD