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Managing to Learn

Managing to Learn
Using the A3 management process to solve problems, gain agreement, mentor, and lead
by John Shook
James P. Womack, Ph.D.
- founder and chairman of the Lean Enterprise Institute, a nonprofit training, publishing, and research organization founded in 1997 to help companies create value and eliminate waste.

Co-author of:
• *Lean Thinking* (Simon & Schuster, 1996)
• *Seeing The Whole: mapping the extended value stream* (Lean Enterprise Institute, 2001)
• *Lean Solutions* (Simon & Schuster, 2005)
Progression of Lean at LEI

Principles
Tools
Management
Principles

Value, value stream, flow, pull & perfection.
Now shortened to:
Purpose, process, people.
Tools

Cellular layouts
Materials and information flow
Leveled pull
Value stream mapping (VSM)
Value stream mapping across organizations
Management

High level: Agreement on organizational purpose, through strategy deployment.

Mid-level: Problem solving, proposal evaluation & deployment, with A3 analysis.

Lower level: Standardized work, by means of standard management & kaizen.

Answering the questions:

✓ What do managers do?
✓ How are new managers created?
Today’s Challenge for Lean Management

Fully understanding A3:
A tool for solving problems, evaluating proposals & implementing.

Answering the question: What do managers do?

A way to create new lean managers, through gemba learning by solving problems.
John Shook
Lean Transformations Group
LEI Senior Advisor

✓ Hired by Toyota in 1983 to help manage the transfer of the Toyota management system across the world.
✓ Taught to be a lean manager by preparing A3s as a deshi in Toyota City.
✓ Co-author of *Learning to See* (VSM).
✓ Now placing VSM in a management context in his new book *Managing to Learn*.
Managing to Learn

Using the A3 management process to solve problems, gain agreement, mentor, and lead
A question I often hear...
A question I often hear...

“John, I can’t get my people to do this. How can I get my people to do this…?”
A question I ask in response...

How do you want to manage?
How do you want to manage?
What is an A3?

“A3” is just a paper size (international 11 x 17)

A3 planning began in the 60s as the Quality Circle problem-solving format.

At Toyota, it evolved to become the standard format for problem-solving, proposals, plans, and status reviews.

What is important is not the format, but the process and thinking behind it.
The A3 Process

• lays out entire plans or reports, large or small, on one sheet of paper
• should tell a story, laid out from upper left-hand side to lower right, which anyone can understand
• must be visual and extremely concise
The A3 Process

• makes it easier for you
  • to understand others and
  • to persuade others

• fosters dialogue within the organization

• encourages front-line initiative

• develops thinking problem-solvers
The A3 Process

• encourages P-D-C-A
• clarifies the link between true problems, root causes and countermeasures
• forces “5S of information”
• serves as an organizational learning tool
• leads to effective countermeasures based on facts
The A3 Process in summary

• structures effective and efficient dialogue
  • enabling mentoring, fact-based problem-identification and more
• that fosters understanding leading to agreement
  • enabling problem-solving, decision-making, execution and more
• through developing people and engaging them to accept responsibility and take initiative
The A3 process to develop people
The A3 process to develop people

• It is more important to provide the right question than the right answer
The A3 process to develop people

• It is more important to provide the right question than the right answer
• The A3 Process provides a standard structure to ask good questions
Title: What you are talking about?

I. Background
   Why are you talking about it?

II. Current Conditions
   Where do things stand today?
   - Show visually using charts, graphs, drawings, maps, etc.
   What is the problem?

III. Goals/Targets
   What specific outcomes are required?

IV. Analysis
   What is the root cause(s) of the problem?
   - Choose the simplest problem-analysis tool that clearly shows the cause-and-effect relationship.

V. Proposed Countermeasures
   What is your proposal to reach the future state, the target condition?
   How will your recommended countermeasures affect the root cause to achieve the target?

VI. Plan
   What activities will be required for implementation and who will be responsible for what and when?
   What are the indicators of performance or progress?
   - Incorporate a Gantt chart or similar diagram that shows actions/outcomes, timeline, and responsibilities. May include details on specific means of implementation.

VII. Followup
   What issues can be anticipated?
   - Ensure ongoing PDCA.
   - Capture and share learning.
The Deshi's first A3 – jumping to a solution

I. Background
New domestic plant expansion has massive technical requirements that must be translated from Japanese documents to English. The size and complexity of the project are creating errors and delays.

II. Current Conditions
Cost overruns, delays, and errors due to:
- Sheer volume of documents.
- Multiple and varied vendors (pricing, quality, ease).
- Involvement of various departments and working styles.

III. Goals/Targets
- Simplify and standardize the process.
- Reduce costs by 10%.

IV. Analysis
- Challenge of translating from Japanese to English.
  - Multiple varied vendors create a complex, nonstandard process.
  - Overall improvement can be defined by reduction in cost overruns.

V. Proposed Countermeasures
Simplify and improve process performance by choosing one vendor based on competitive bid process.

VI. Plan
Evaluate current vendor.
Identify new vendor candidates.
Develop bid package, distribute, and choose winning bid.

VII. Followup
Monitor cost to proposal.
Review performance at end of one-year contract.
Put contract up for bid again if performance goals are not met.

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What is the problem?

Perception of presenting problem

Clarify the problem

“Real” problem

Understand the way work is done

Gemba

Why? → Direct cause

Why? → Cause

Why? → Cause

Why? → Cause

Why? → Root cause

Countermeasures

Grasp the situation
What is the actual problem in performance?

Problem breakdown
Go to the gemba, get the facts first-hand, analyze them thoroughly and objectively.

Cause investigation
Determine the root cause of why the problem is occurring.
The Deshi’s Problem

Perception of problem: High cost, lateness, and poor quality of translated documents

- Delays and expediting
- Rework and lost documents
- Errors
- Translators can’t understand the Japanese job instruction documents well enough to translate them

Problems with original documents

Variation in language of original Japanese documents

Standard vocabulary
The Deshi’s Authorized A3

Perfect Document Translation

I. Background
- Acme Plant to double capacity. Much document translation required.
  - Poor English translations of Japanese documents caused many problems at original plant startup.
  - Expansion plans call for aggressive launch timeline and cost reduction.

II. Current Conditions
- Documents by department:
  - Engineering
  - Technical engineering documents
  - Other documents
- Current state map:
  - Lead time: 3-5 weeks
  - Cost: 10% over budget
  - Delivery: Over 50% late, long, variable lead times
  - Quality: Multi-rework > 50% many errors reach customer

III. Goals/Targets
- Quality:
  - 0 defects at launch: Rework less than 10%
- Delivery:
  - 100% on-time
  - Level weekly volume (heijunka): Consistent short lead time with predictable delivery
- Cost:
  - 10% decrease: Rework down, overtime down

IV. Analysis
- Cause:
  - Large volumes
  - Random causes
  - Insufficient training

- Effect:
  - Poor document translation: Multi-rework, frequent rework

V. Proposed Countermeasures
- Cause:
  - Large volumes
  - Random causes
  - Insufficient training
- Countermeasure:
  - Overhaul process ownership established
  - Document flow and timing management
  - Timing control chart, weekly check

- Benefit:
  - Delivery, Quality

- Responsible:
  - Porter
  - Each day
  - Vendors

Do the countermeasures address the three groupings of root causes?

Has the list of countermeasures been achieved/reduced by giving all earlier options proper consideration and testing?

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“Pull-based Authority”
Back to the first question
“John, I can’t get my people to do this. How can I get my people to do this…?”
Back to the first question

“John, I can’t get my people to do this. How can I get my people to do this…?”

➔ First, you must do this. It starts with you.
Back to my question
Back to my question

How do you want to manage?
Back to my question

How do you want to manage?

→ Do you want to manage your people to
Back to my question

How do you want to manage?

- Do you want to manage your people to
  - Solve problems?
Back to my question

How do you want to manage?

Do you want to manage your people to

• Solve problems?
• Gain agreement?
Back to my question

How do you want to manage?

Do you want to manage your people to

• Solve problems?
• Gain agreement?
• Be able to lead and mentor other people?
  • through asking good questions that focus on real problems?
How do you want to manage?

If you wish to manage in a way that develops people to solve problems, accept responsibility and take initiative while aligning the organization…

Then give the A3 process a try.
System Kaizen
Eliminate Muri and Mura

Point Kaizen
Eliminate Muda

Sr. Mgmt.

Middle Mgmt.

Front Lines

FOCUS

Managing to Learn
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New Website Feature:

John Shook's Lean Management Column

lean.org/shook
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Part 2 of this webinar
November 13

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