From Firefighting to Lean Leadership

John Shook
Lean Global Network
For CXO 2019

If "Firefighting" is the problem…

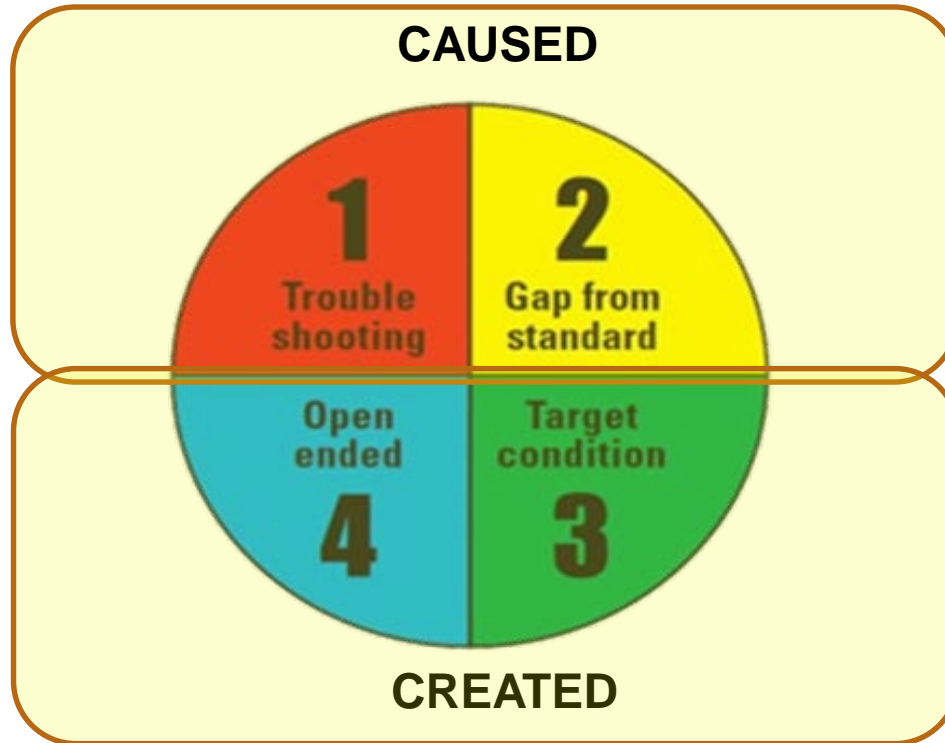→ **Why do we firefight??**

If "Firefighting" is the problem…

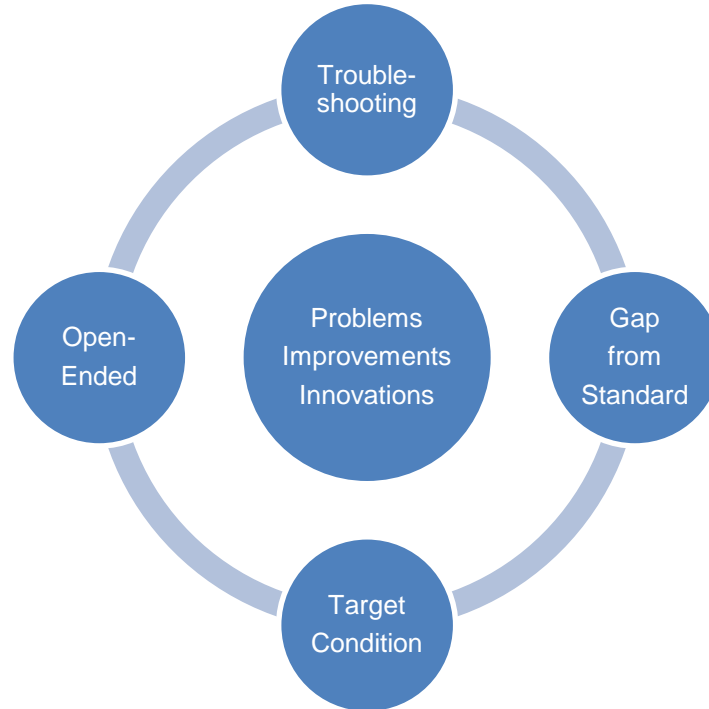Thank you, Dr. Jack Billi, University of Michigan
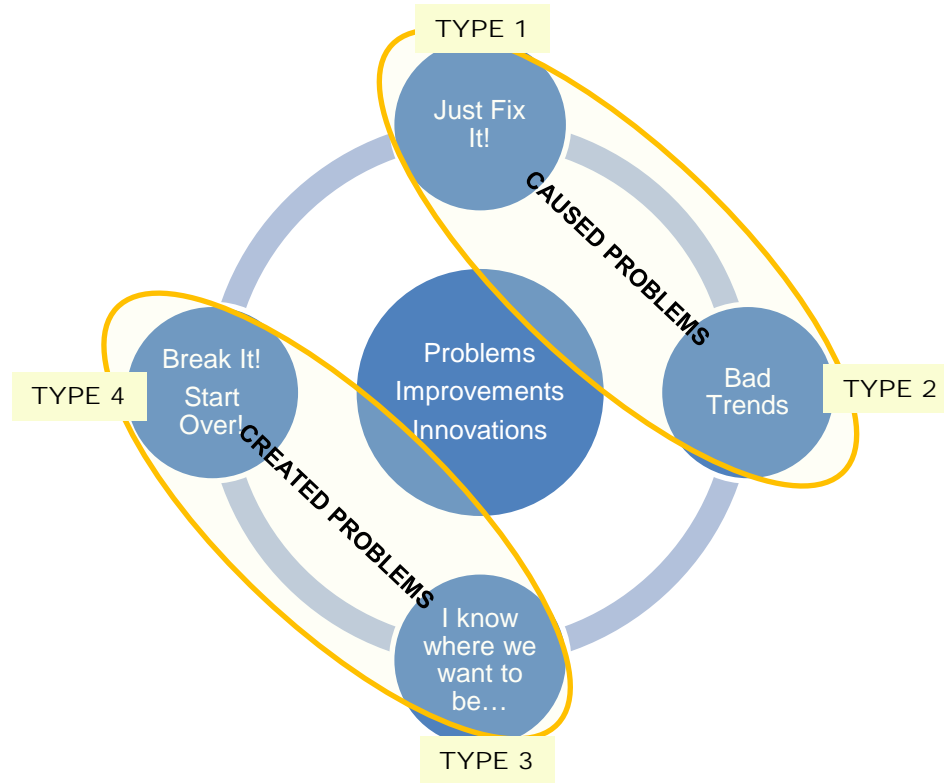
The 4 Types of Problem Solving

Caused Problems and Created Problems

The Four Types of Problem Solving

The Four Types of Problem Solving:
Caused Problems and Created Problems

TYPE 1

Just Fix It!

CAUSED PROBLEMS

Break It!
Start Over!

TYPE 4

Problems
Improvements
Innovations

Bad
Trends

TYPE 2

CREATED PROBLEMS
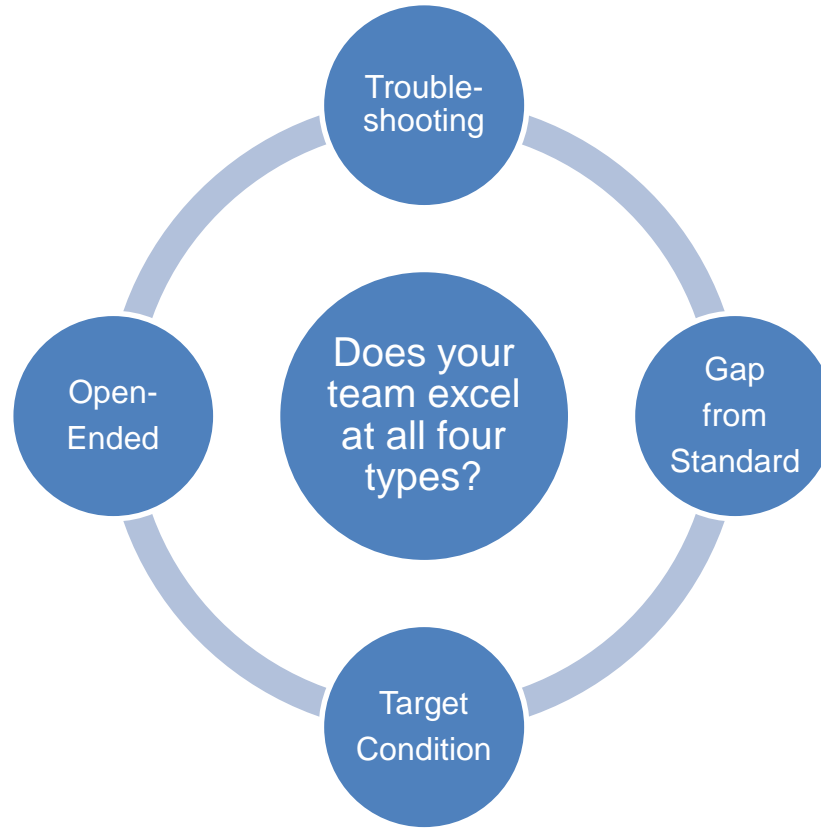
I know where we want to be…

TYPE 3

Flat Tires, Four Ways
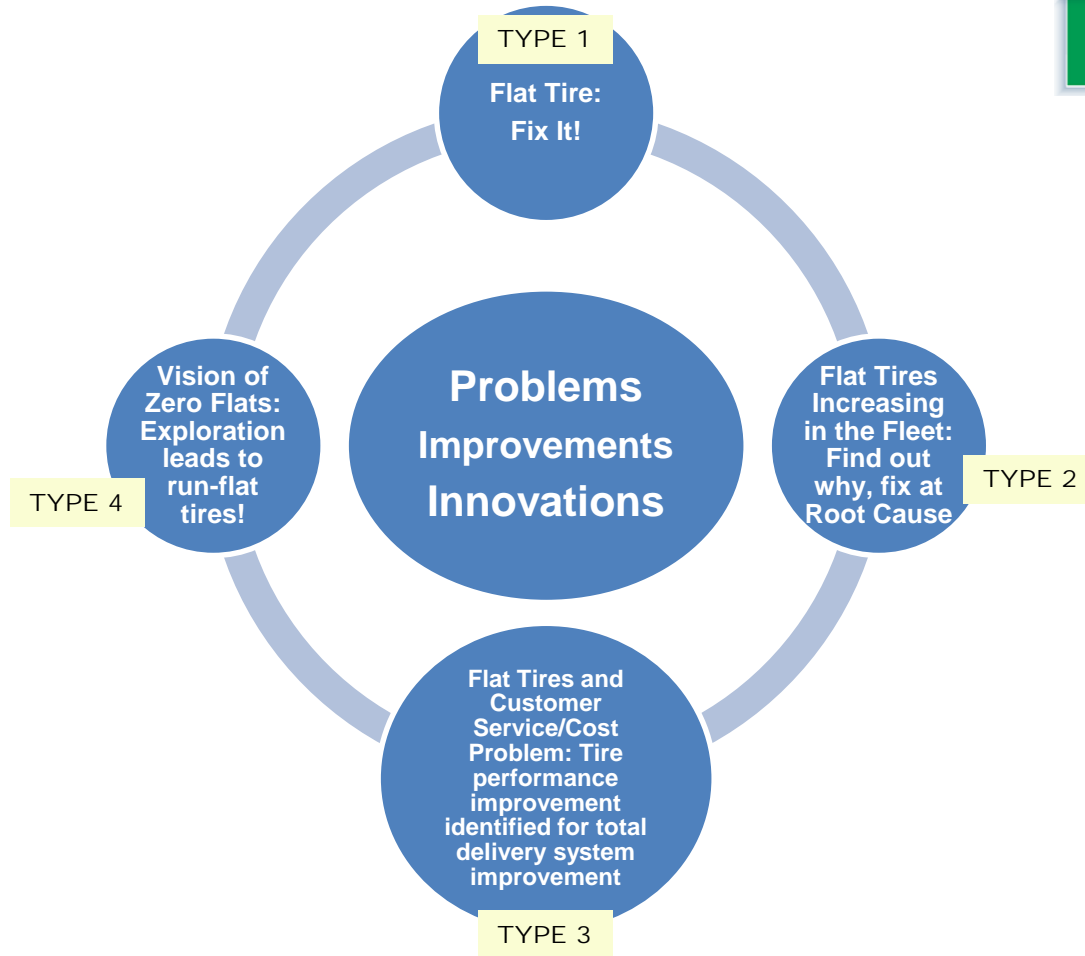
The Four Types of Problem Solving

→ **The intent is to assess your organization's capabilities, NOT to categorize each problem!**
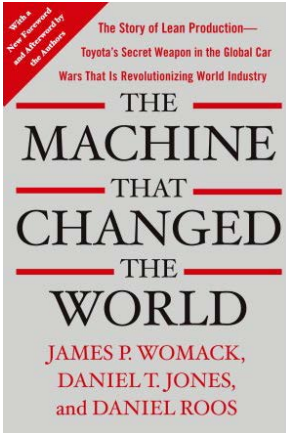

Trouble-shooting

Open-Ended

Does your team excel at all four types?

Gap from Standard

Target Condition

The Four Types of Problem Solving

→ Lean Leadership aims to develop capabilities to support all four types
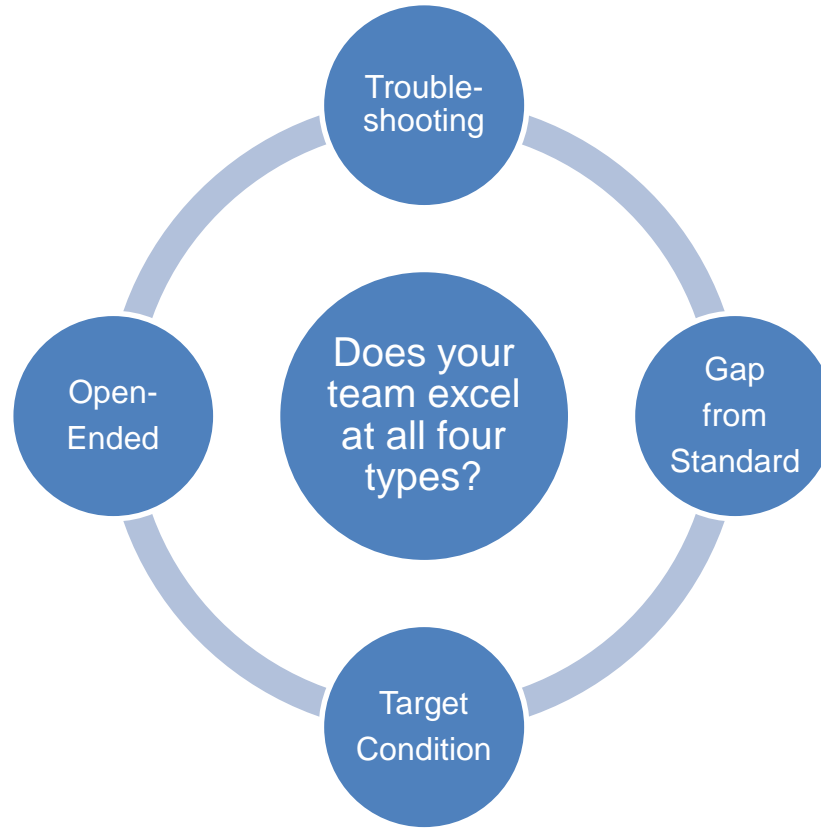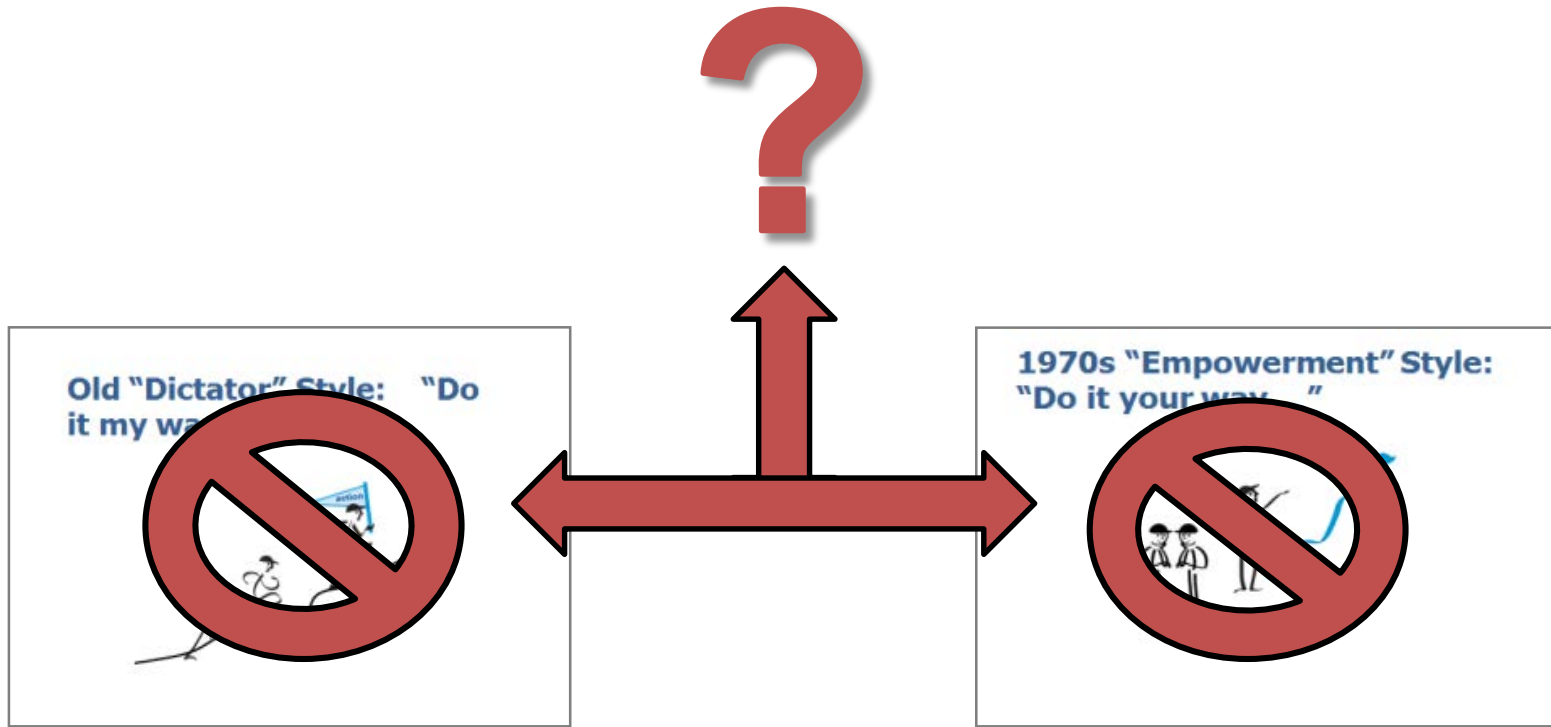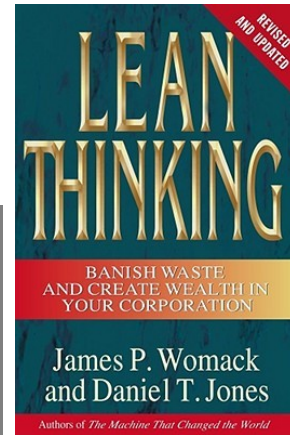
Make value flow from each step to the next with minimum effort, time and total use of resources through people exercising creativity to solve problems and continually improve their work

WHAT is our PURPOSE?
What situational problem do we need to address?

How to design, do and improve the work?

How to develop capability?

FIRE MARSHAL
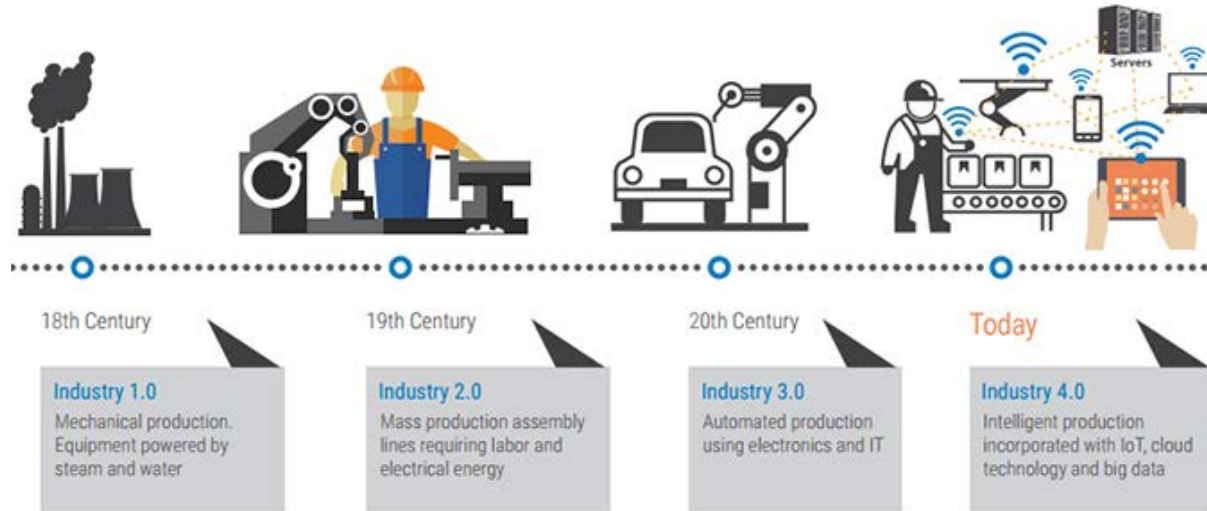
What is our BASIC THINKING??

Lean Thinking as a Process of Endlessly Addressing a Set of Fundamental Questions

1. What is our *purpose*, what *value to create,* or what *problem* are we trying to solve?

2. How do we *design, do, and improve* the *actual work*?

3. How do we identify and *develop the capabilities* we need?

4. What *management system* and *leader behaviors* are required to support the new way of working?

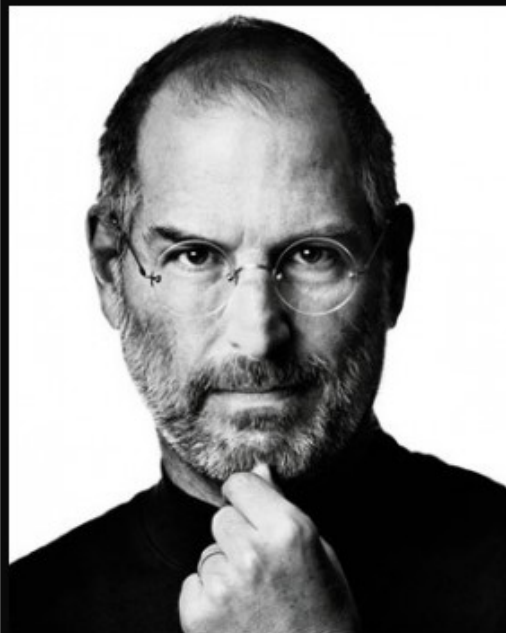5. What *basic thinking, mindset* or *assumptions* underlie this transformation?

What to do, why, and how to do it

Lean Leadership for Enterprise 4.0??

18th Century

Industry 1.0
Mechanical production.
Equipment powered by
steam and water

19th Century

Industry 2.0
Mass production assembly
lines requiring labor and
electrical energy

20th Century

Industry 3.0
Automated production
using electronics and IT

Today

Industry 4.0
Intelligent production
incorporated with IoT, cloud
technology and big data

POLITECNICO
MILANO 1863

Monica Rossi
monica.rossi@polimi.it
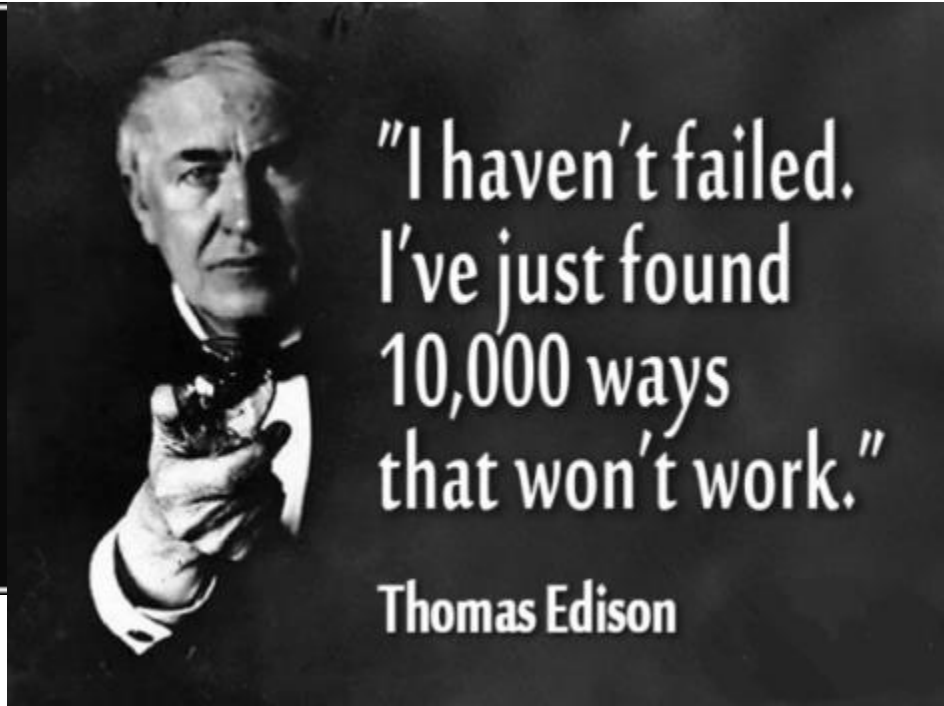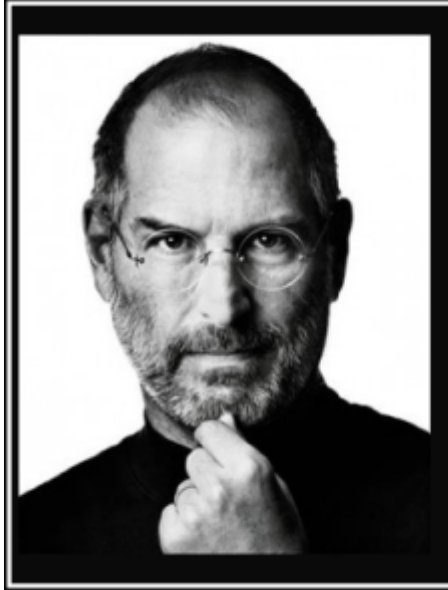
Innovation, Failure and Learning

Sometimes when you innovate, you make mistakes. It is best to admit them quickly, and get on with improving your other innovations.
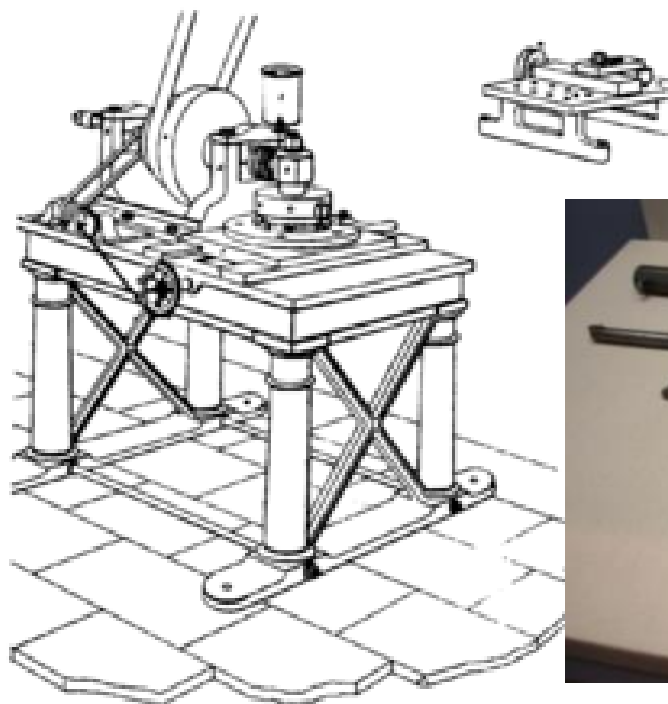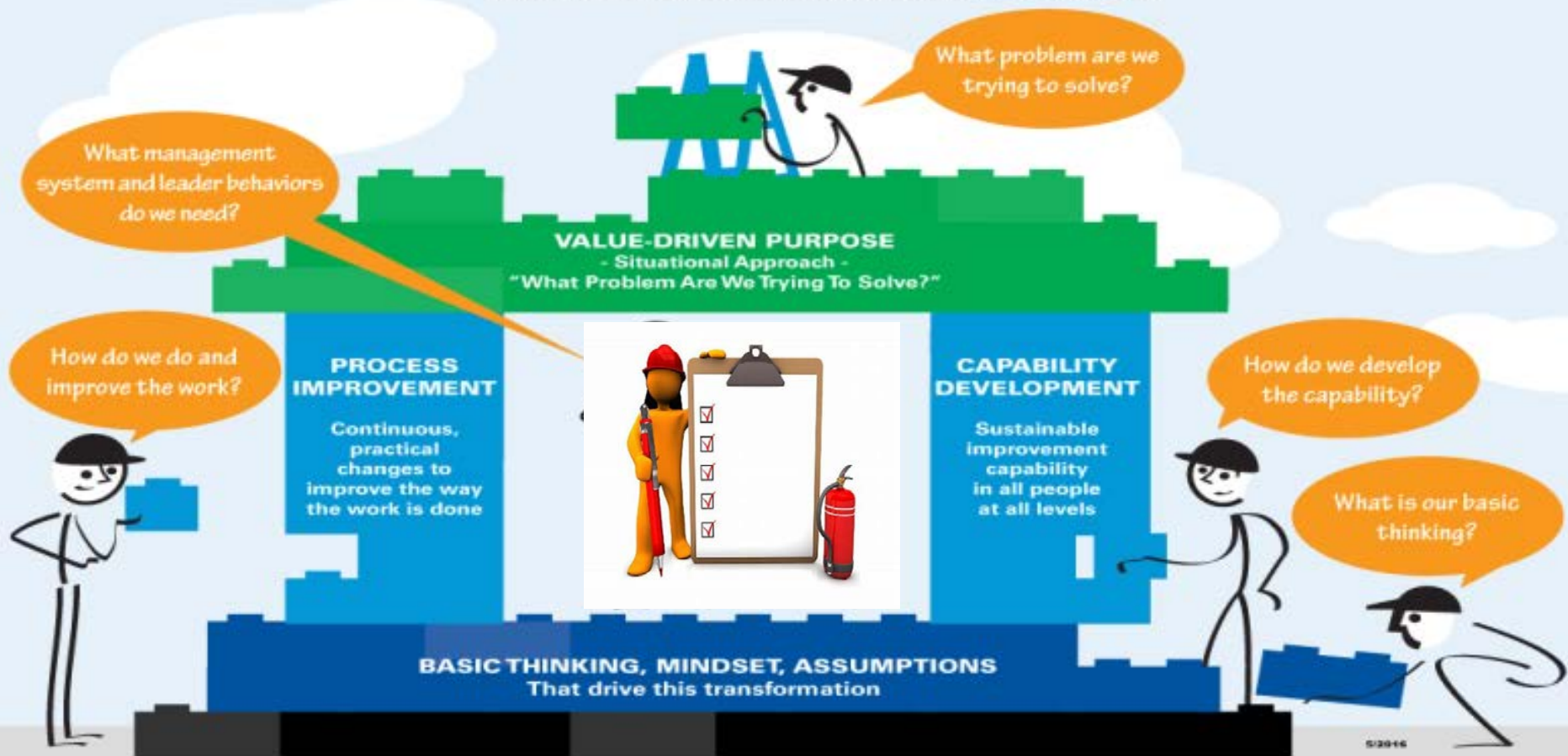
(Steve Jobs)

izquotes.com

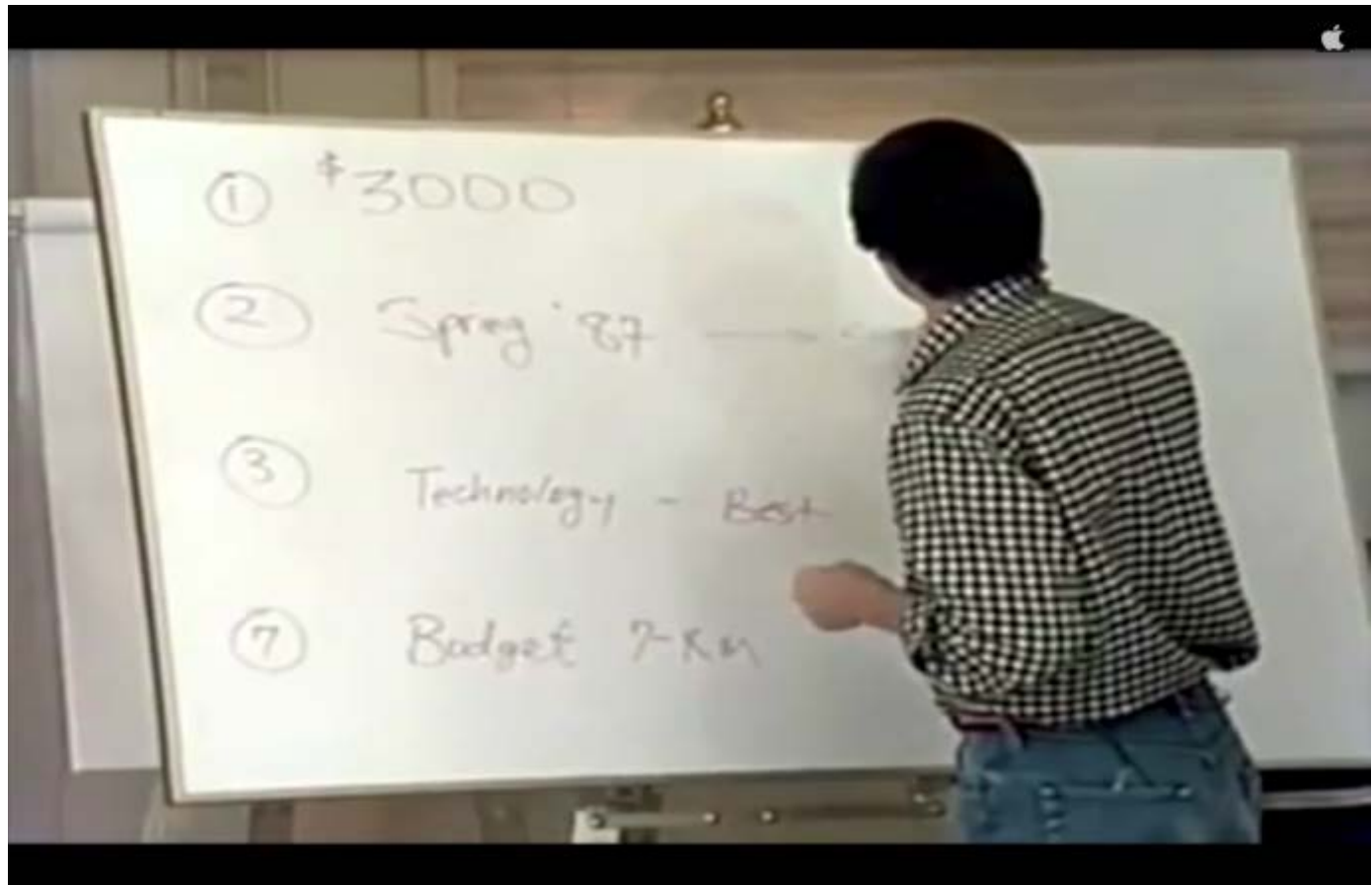# Innovation and Failure – Jobs and Edison

"I haven't failed. I've just found 10,000 ways that won't work."

Thomas Edison

From Computer Desktop Encyclopedia
Reproduced with permission.
© 1996 Apple Computer, Inc.

If "Firefighting" is a problem…

Thank you, Dr. Jack Billi, University of Michigan

People Development – Manager as Coach

Develop Capability in

doing the work

solving problems

improving performance

Problem-solving

Improvement

Improvement   Problem-solving

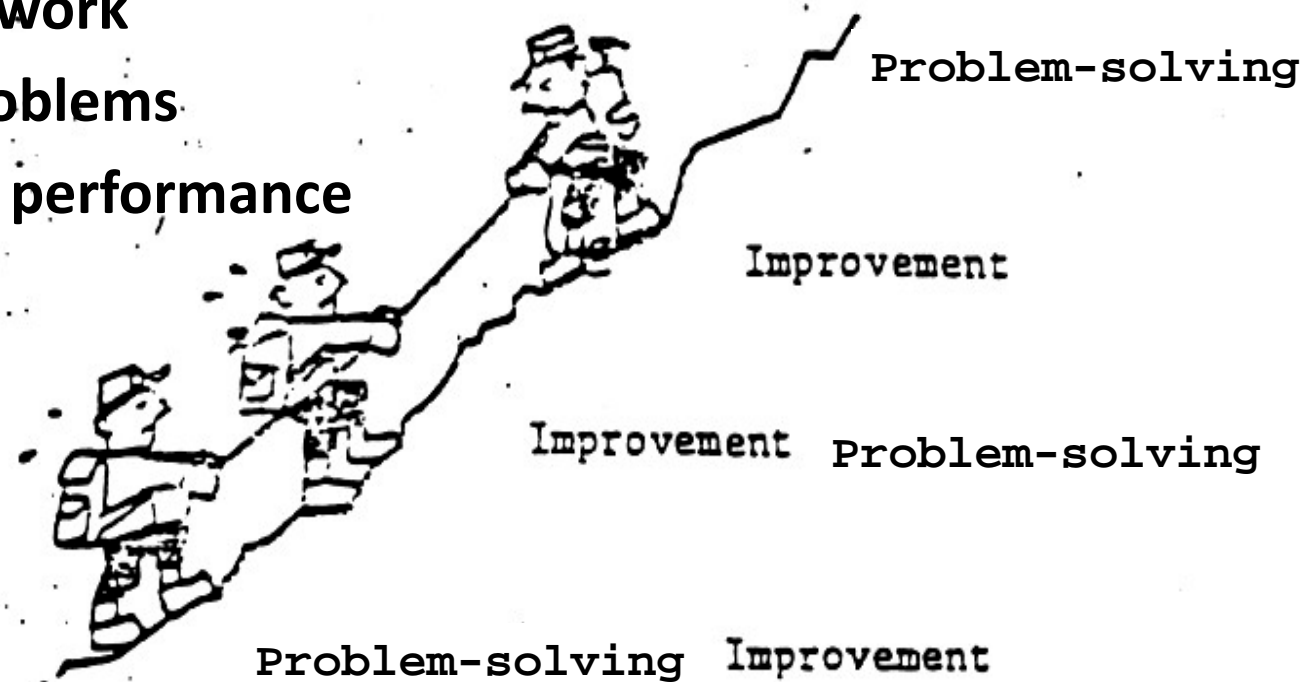Problem-solving   Improvement
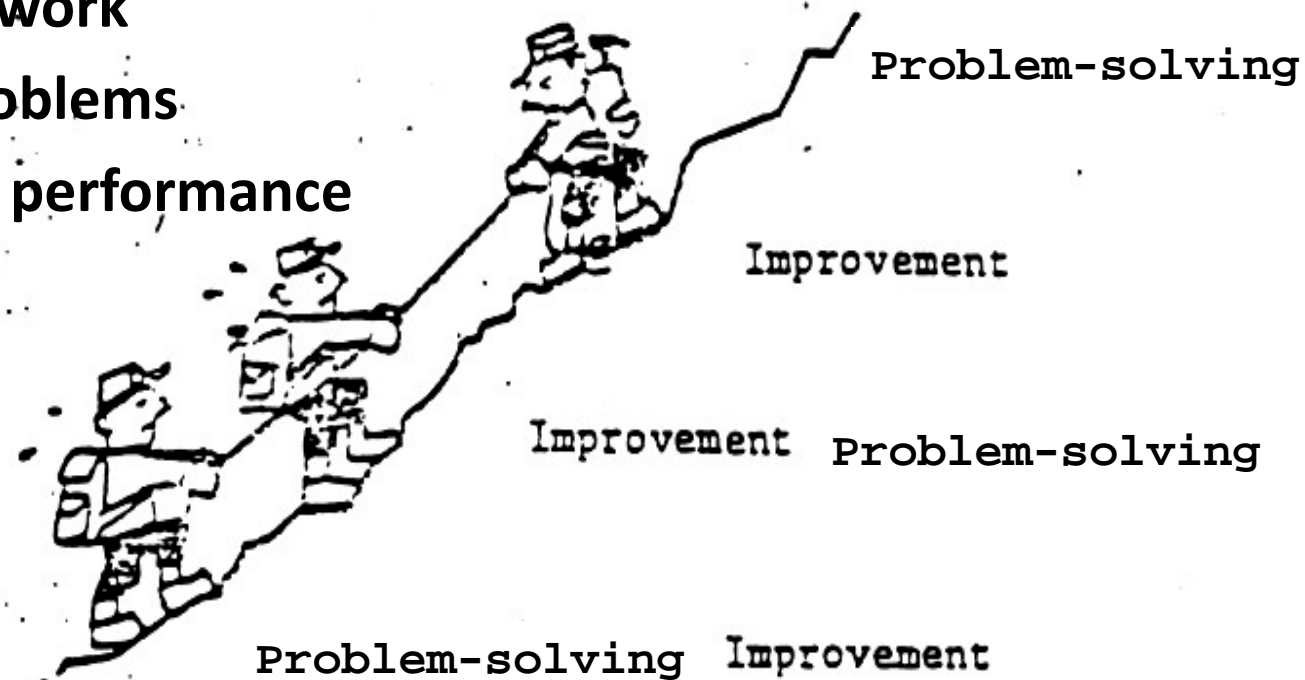
People Development – Manager as Coach

Develop Capability through
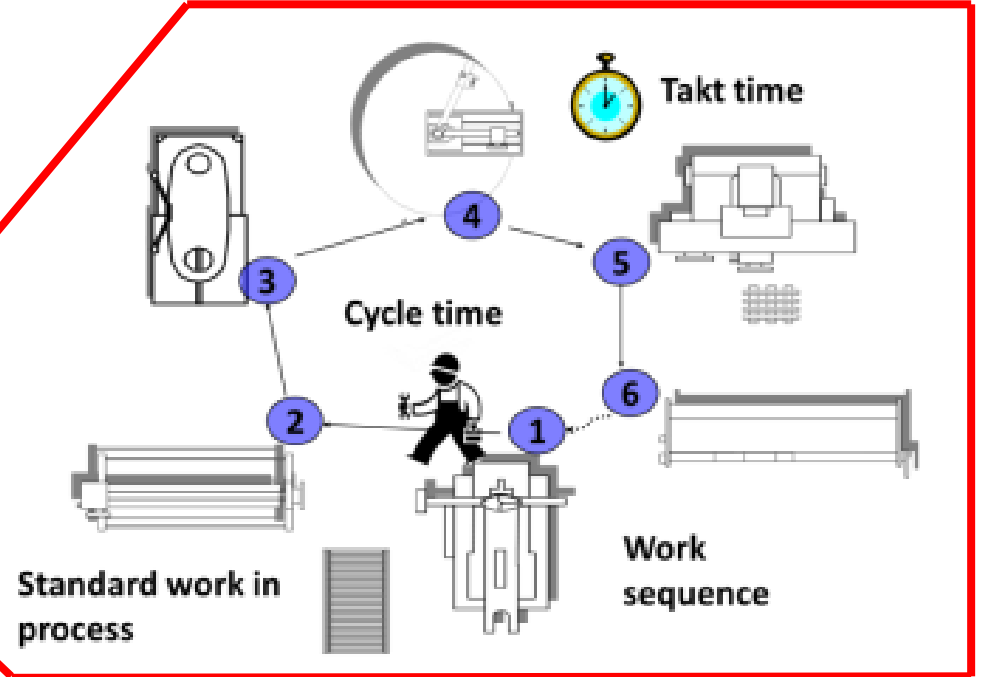
      doing the work

      solving problems

      improving performance
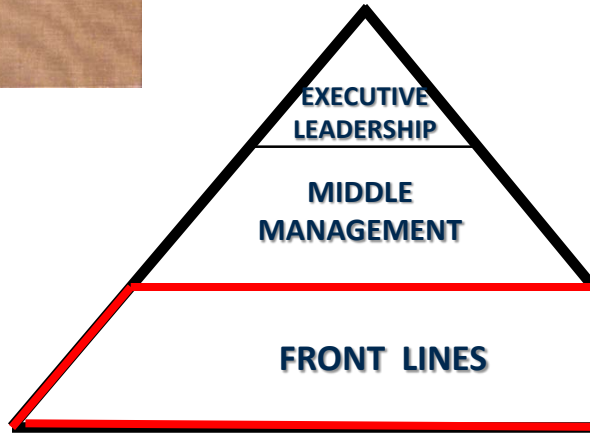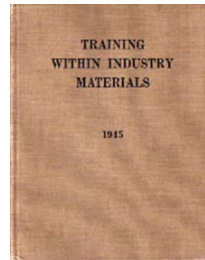
Problem-solving

Improvement

Improvement   Problem-solving

Problem-solving   Improvement

Value Creating Work

Design the *work experience…Use lean PDCA tools:* Standardized Work, TWI, Kata…

TRAINING WITHIN INDUSTRY MATERIALS

1945

EXECUTIVE LEADERSHIP

MIDDLE MANAGEMENT

FRONT LINES

Takt time

Cycle time

Work sequence

Standard work in process

Middle Management

Develop capability to develop capability to improve …via the A3 Process
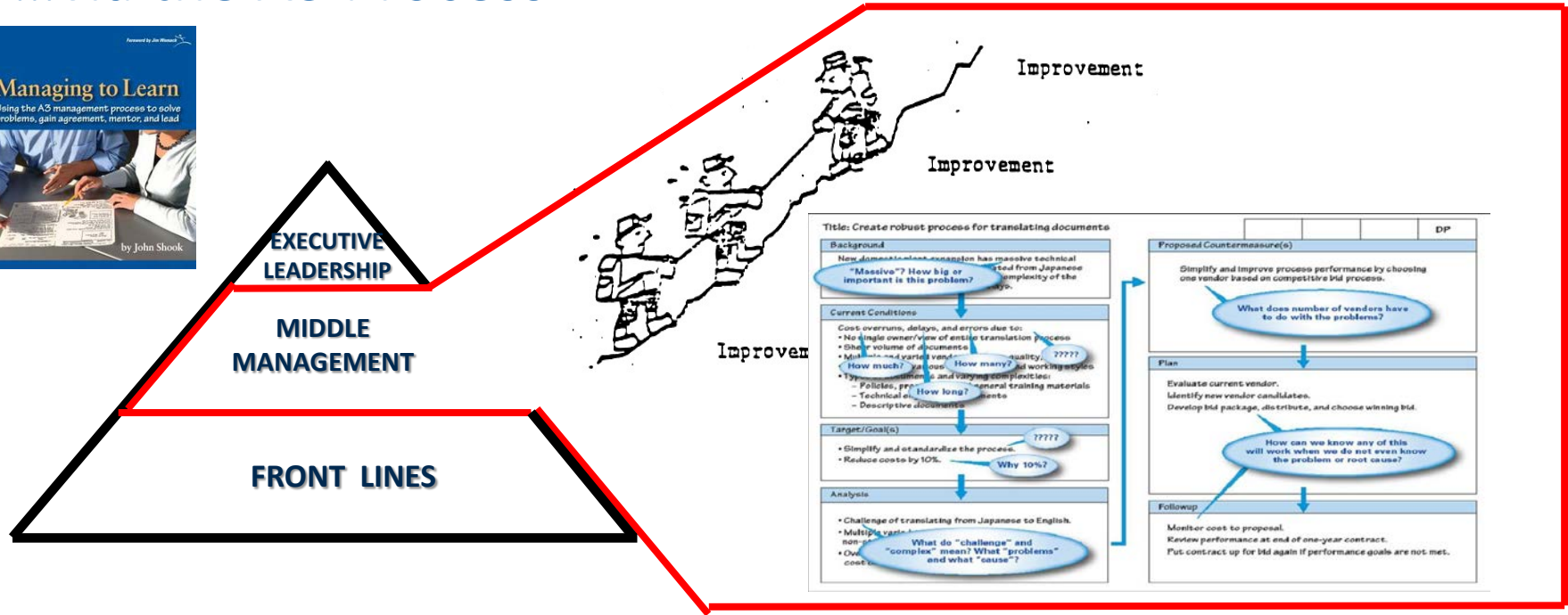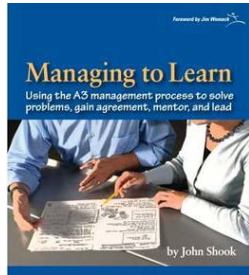
Middle Management

Develop capability to develop capability to improve
…via Value Stream Improvement
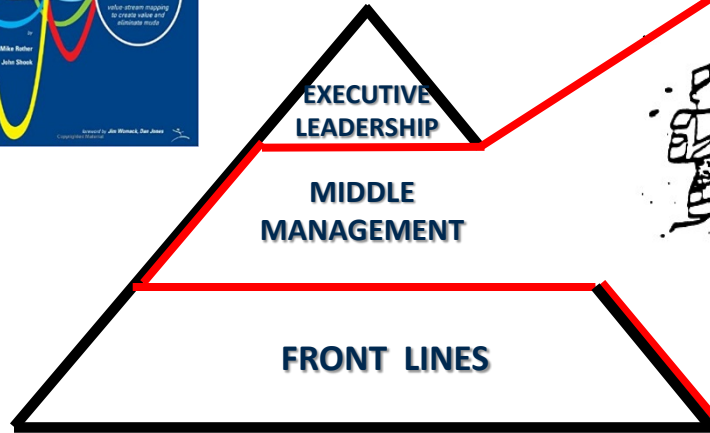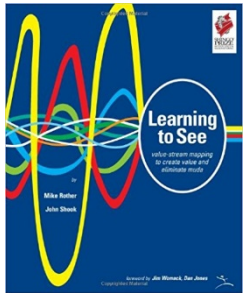
Senior Leadership

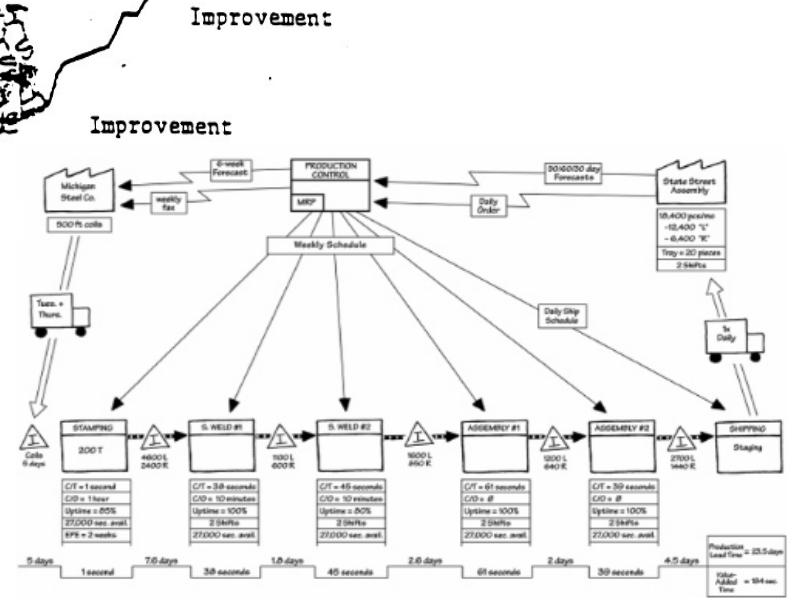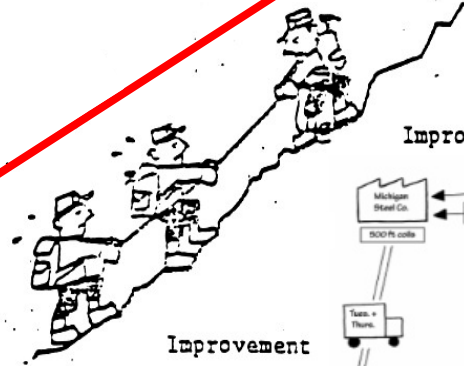## Take responsibility to develop total system capability

EXECUTIVE LEADERSHIP

MIDDLE MANAGEMENT

FRONT LINES

the Work of Management
A Daily Path to Sustainable Improvement
by Jim Lancaster
with Emily Adams
Foreword by Jim Womack

FROM TODAY'S
AS-IS CONDITION…

?

TO TOMORROW'S
SHOULD-BE
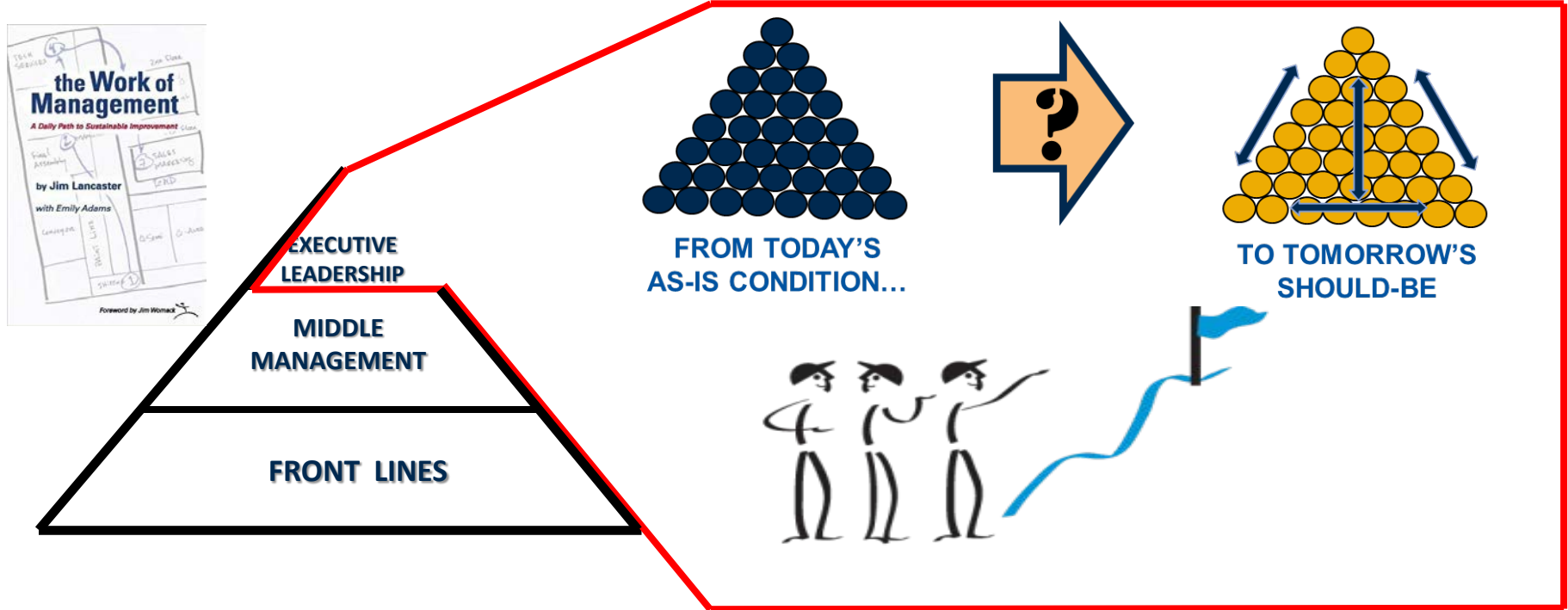
Senior Management

Take responsibility to develop total system capability
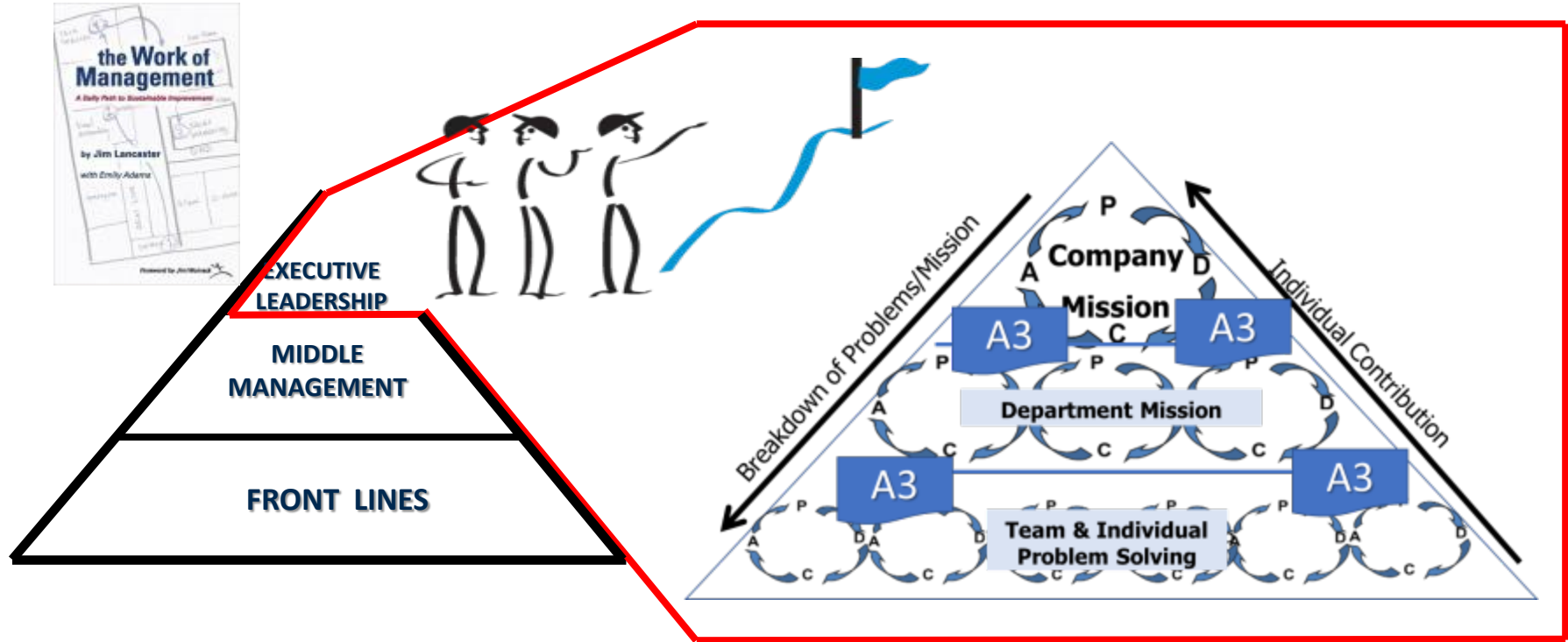
PDCA at Each Organizational Level
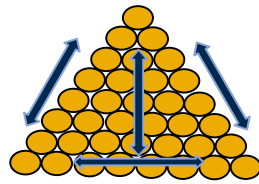
Macro System Level

Value Stream Level or

Factory, Hospital, Office, Department Level

Level of Each Individual Job

Plan-Do-Check-Act Cycle

From pDpD (try, fail, try, fail) to PDCA cycle

Hypothesis — Plan
Try — Do
Study/Reflect — Check
Adjust and Standardize — Act
Grasp the Situation

W. Edwards Deming — Out of the Crisis
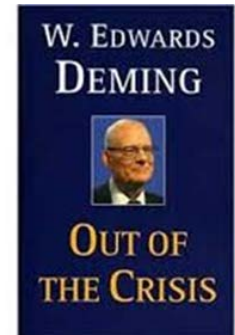
Aligned Problem Solving at Each Organizational Level
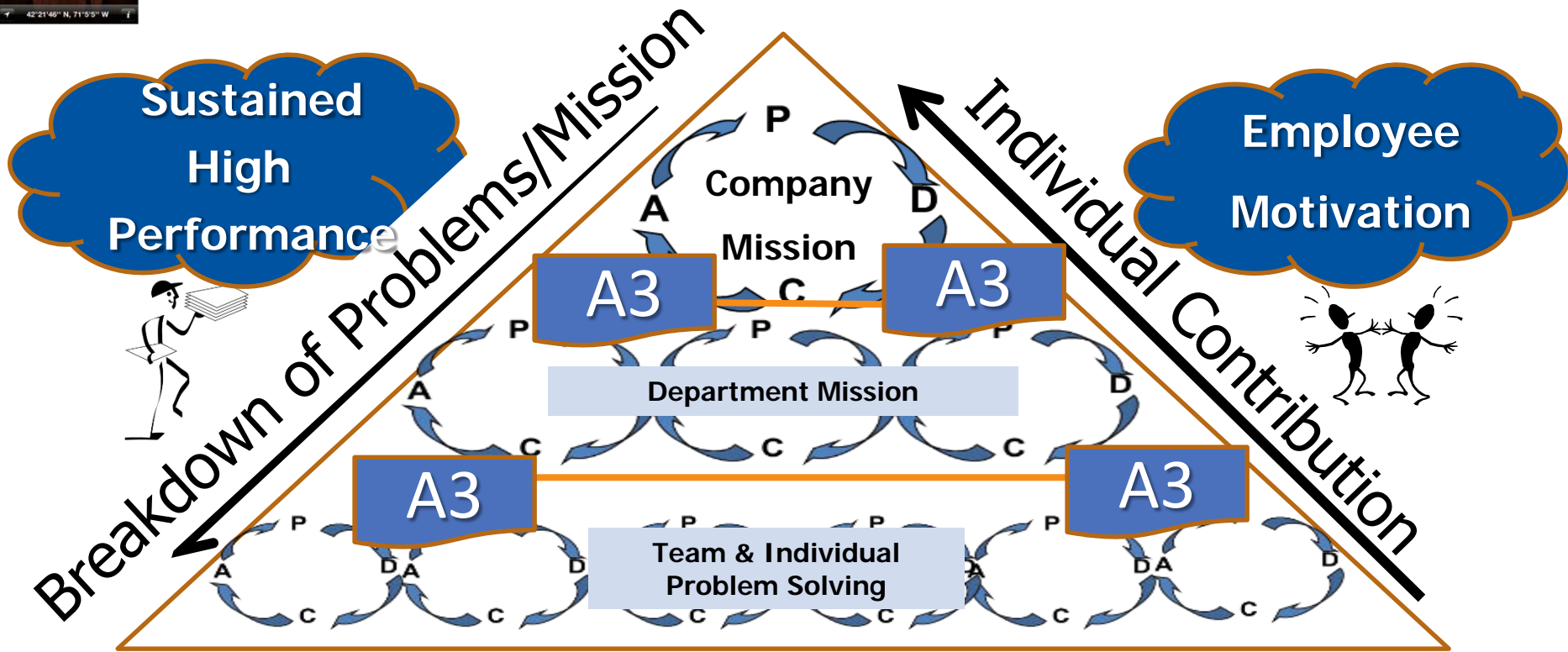
Create Line of Sight From *Purpose* to *Each Person*

Connect Work to Purpose and Performance

Understand what makes each job value creating for the organization and customer—how does it relate to the purpose and key performance indicators?

Society

Organization

Bus Unit

Team

| Responsibilities | → | Guiding Targets | → | Company's Purpose |
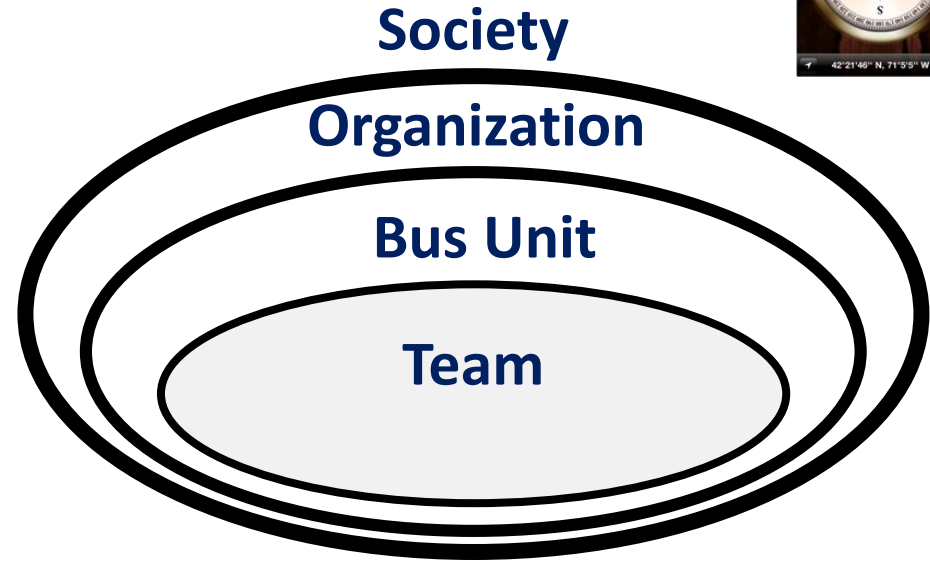
True North

What it is:

- Words or pictures that express the direction
- With clarity and ideally emotional impact
- A target condition with indicators

Purpose

Current Performance
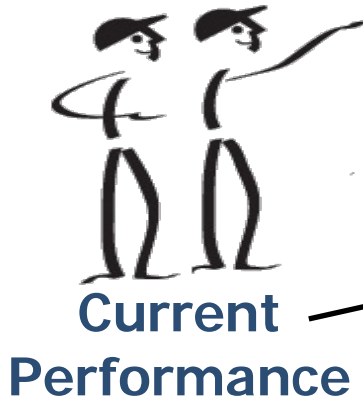
- Derives from deep Grasping of the Situation: Purpose, Mission, Vision, Value

- A contract based on deep agreement

- Pulls people to action

Ackoff on Problem Solving

"*Managers are not confronted with problems that are independent of each other, but with dynamic situations that consists of complex systems of changing problems that interact with each other. I call such situations messes.*
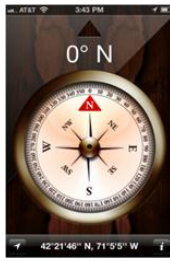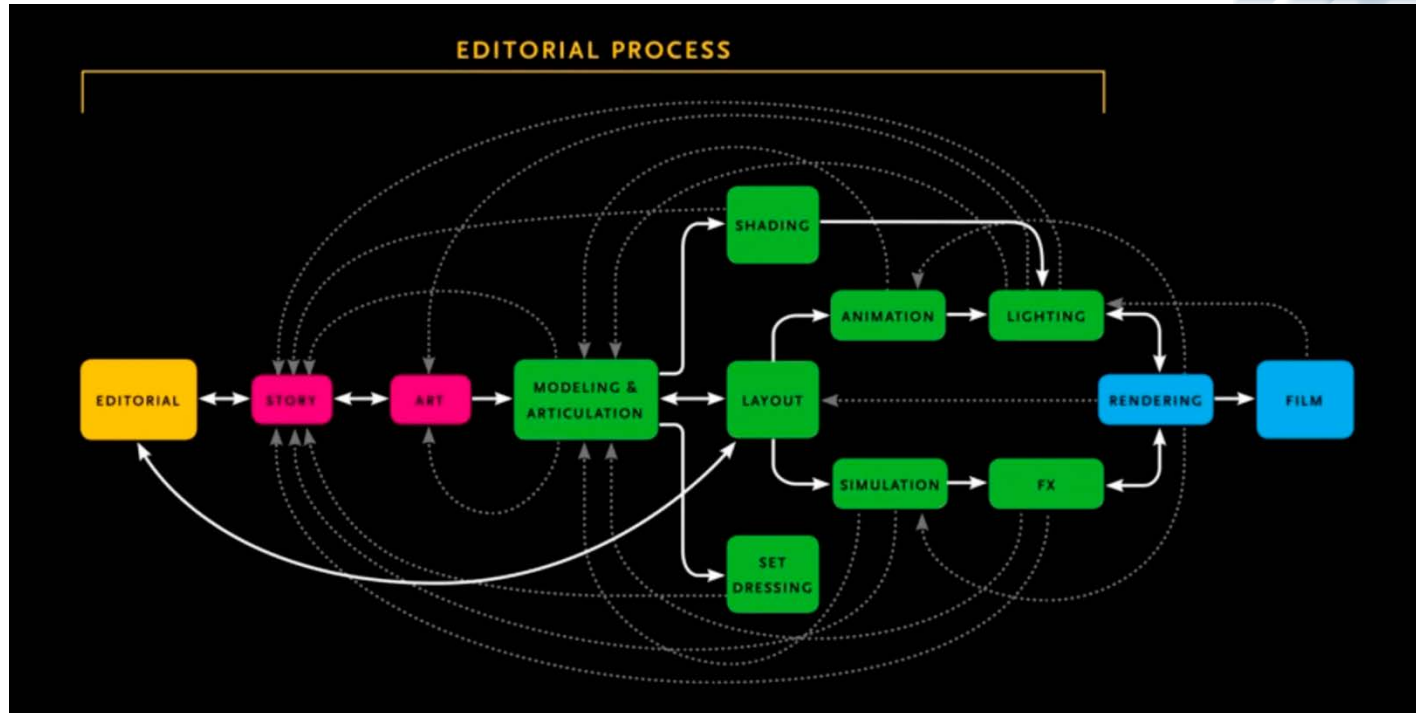
Managers do not solve problems, they manage messes. (They need the skill of) designing a desirable future and inventing ways of bringing it about."
(1979)

Russell Ackoff

Pixar Process Mess

Creating the *Conditions for Innovation*

"Conventional leadership theories stress the importance of creating a vision and inspiring others to execute it. But leading a creative organization is less about directing people than creating an environment where members explore for themselves and collectively to discover ways forward."
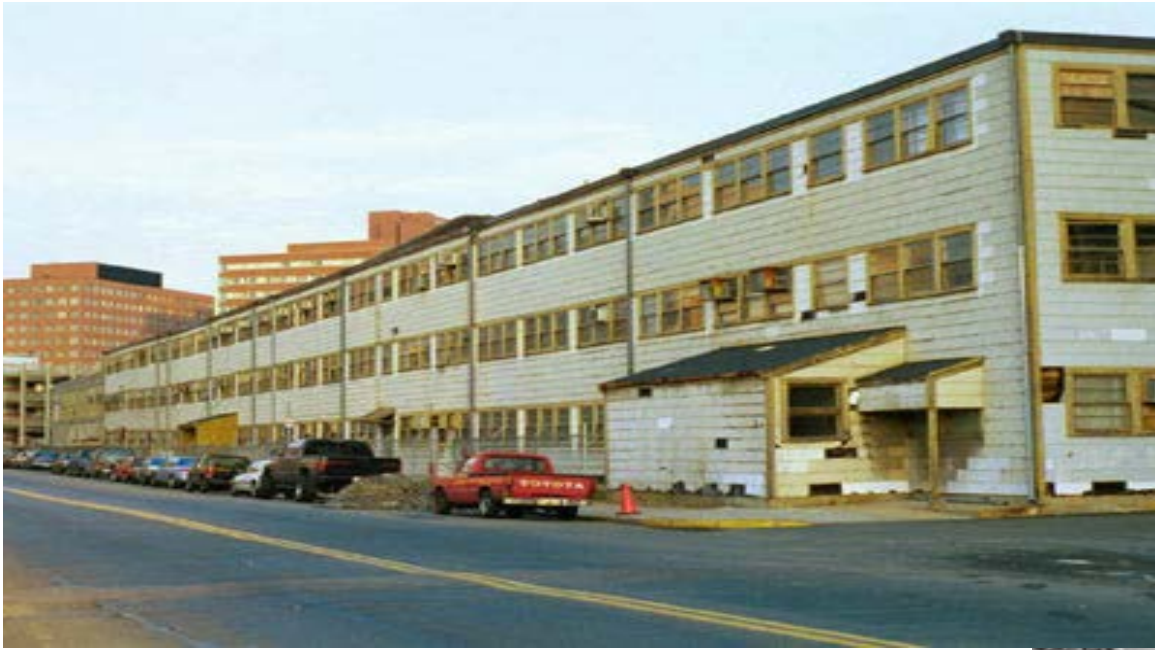
Collective Genius

Prof Linda Hill

Harvard Leadership Initiative

The Conditions for Innovation: MIT Building 20

Temporary Building 1942–1998

MIT's Magic Incubator

MIT's Magical Incubator

An eclectic group of departments and researchers including the Research Laboratory of Electronics, the Laboratory for Nuclear Science, the Linguistics Department, the particle accelerator project, and many more. People who knew little about each other, thrust together within the walls of an awful building.

→ "And yet, by the time it was finally demolished, in 1998, Building 20 had become a legend of innovation, widely regarded as one of the most creative spaces in the world" (Jonah Leherer).

→ Over its forty years, the building had amassed an almost unbelievable track record of breakthroughs. It saw, for example, the first video game, the first advances in physics behind microwaves, major developments in high-speed photography, the creation of the Bose Corporation, modern computer hacking, etc.

Why? The structure forced all different types of scientists and thinkers to interact. Being "temporary" and humble gave everyone permission to do what they w
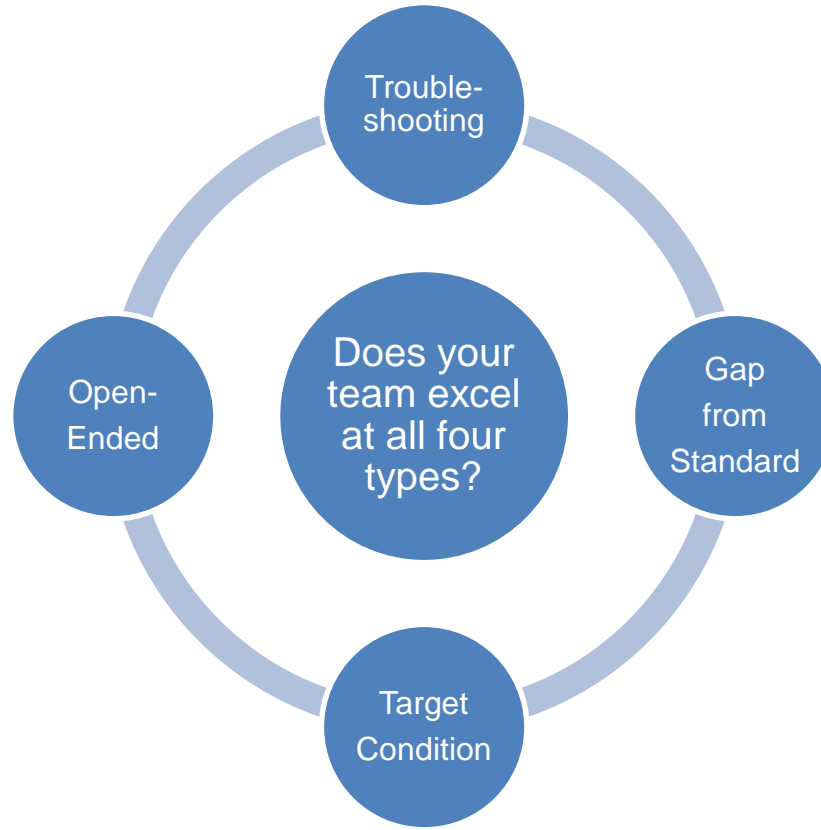
MIT Building 20 Versus MIT Media Lab

The Four Types of Problem Solving
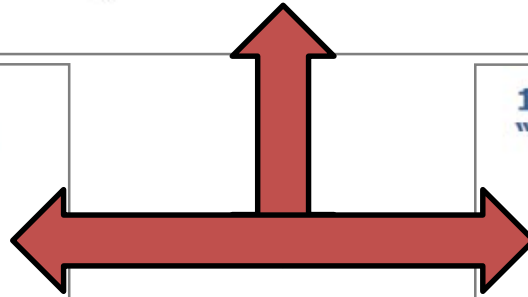→ **Lean Leadership aims to develop capabilities to support all four types**

"Lead as if you have no power"

Lean Style:

Old "Dictator" Style: "Do it my way..."

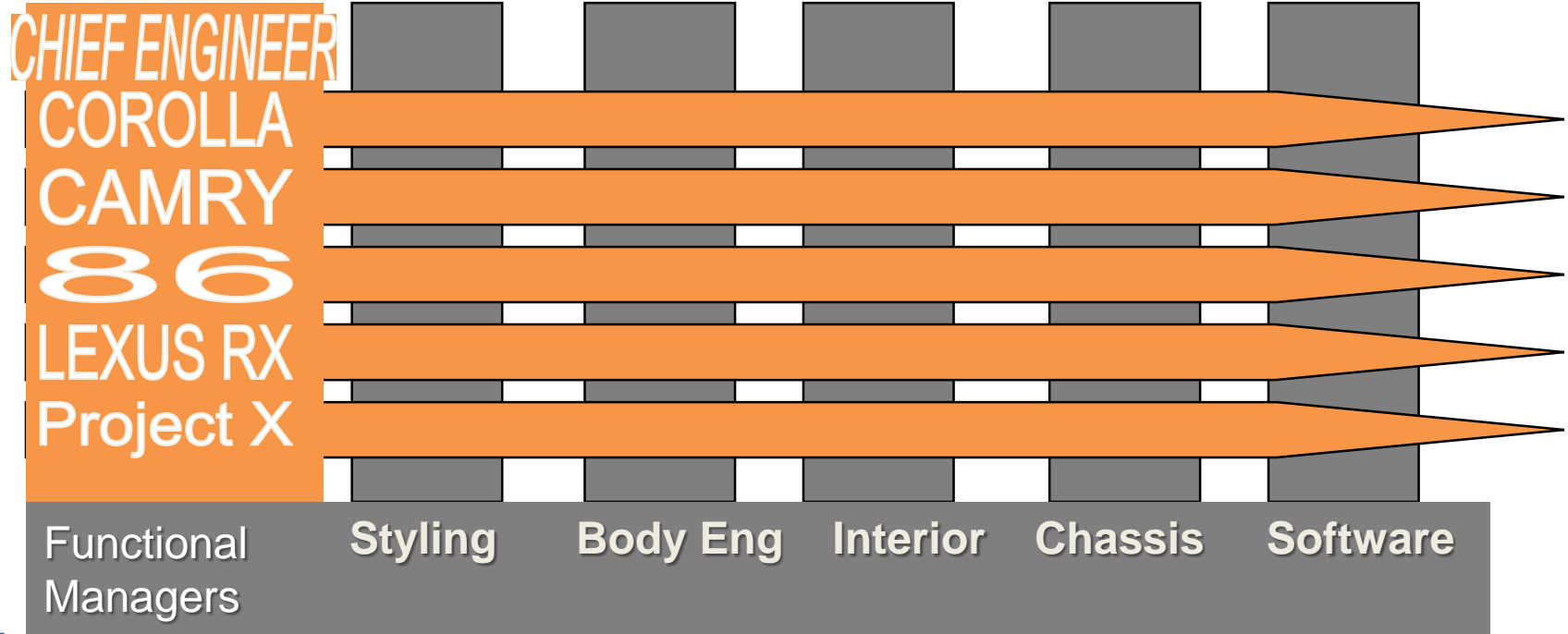1970s "Empowerment" Style: "Do it your way..."

Lean Management
Responsibility ≠ Authority
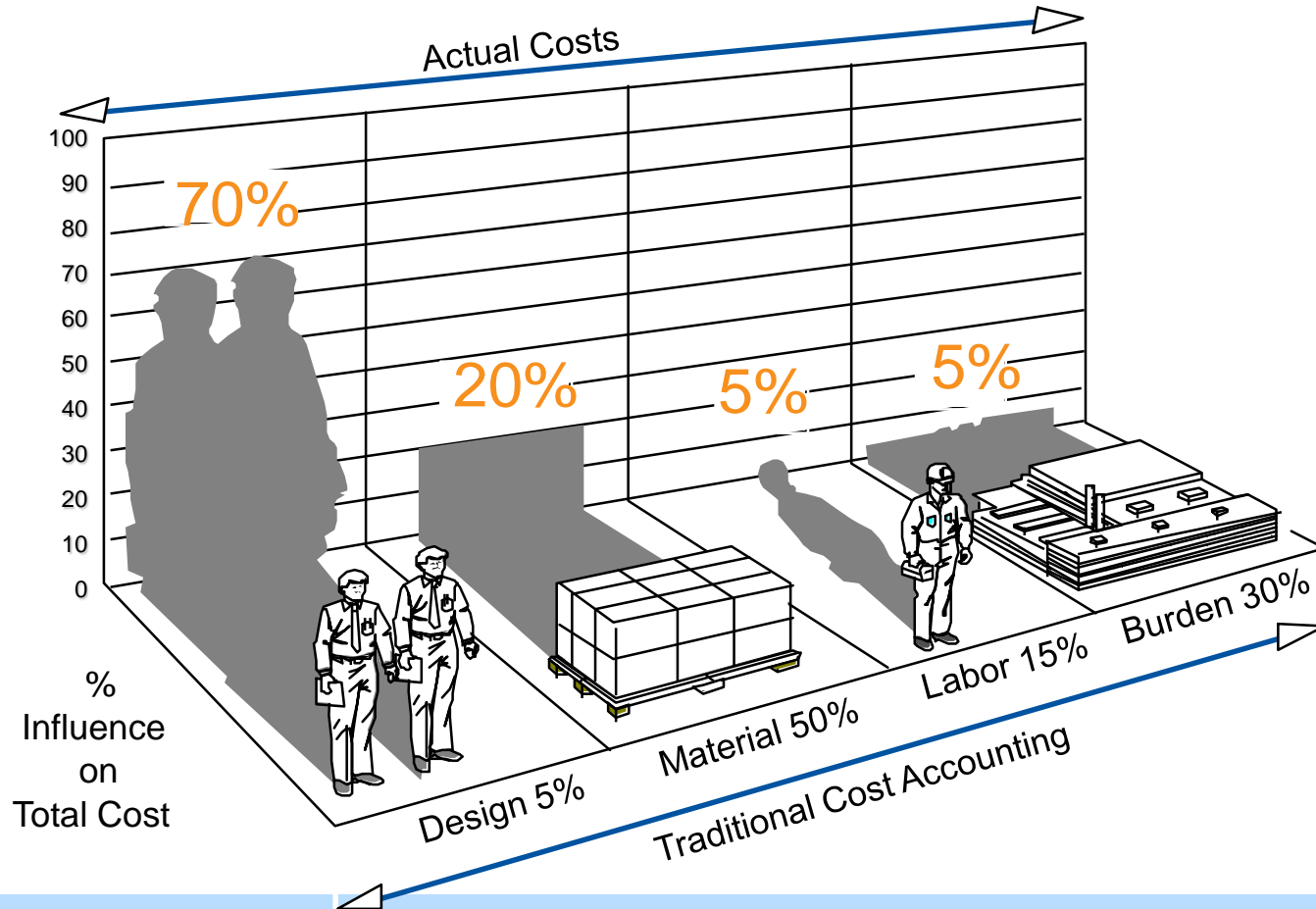
- **Not "bottom-up" or "top-down".**

- **Processes well-defined and responsibility clear.**

- **From debate about *decision rights* (authority) to dialogue around the *right decision*.**

Action and Responsibility to Lead Without Power of Position

CHIEF ENGINEER
COROLLA
CAMRY
86
LEXUS RX
Project X

Functional Managers

Styling   Body Eng   Interior   Chassis   Software

50

Lean Thinking for Total System Architecture

Actual Costs

% Influence on Total Cost

70%

20%

5%

5%

100
90
80
70
60
50
40
30
20
10
0

Design 5%

Material 50%

Labor 15%

Burden 30%

Traditional Cost Accounting

Responsibility to ensure both doing & learning: Chief Engineer as Chief Learning Architect
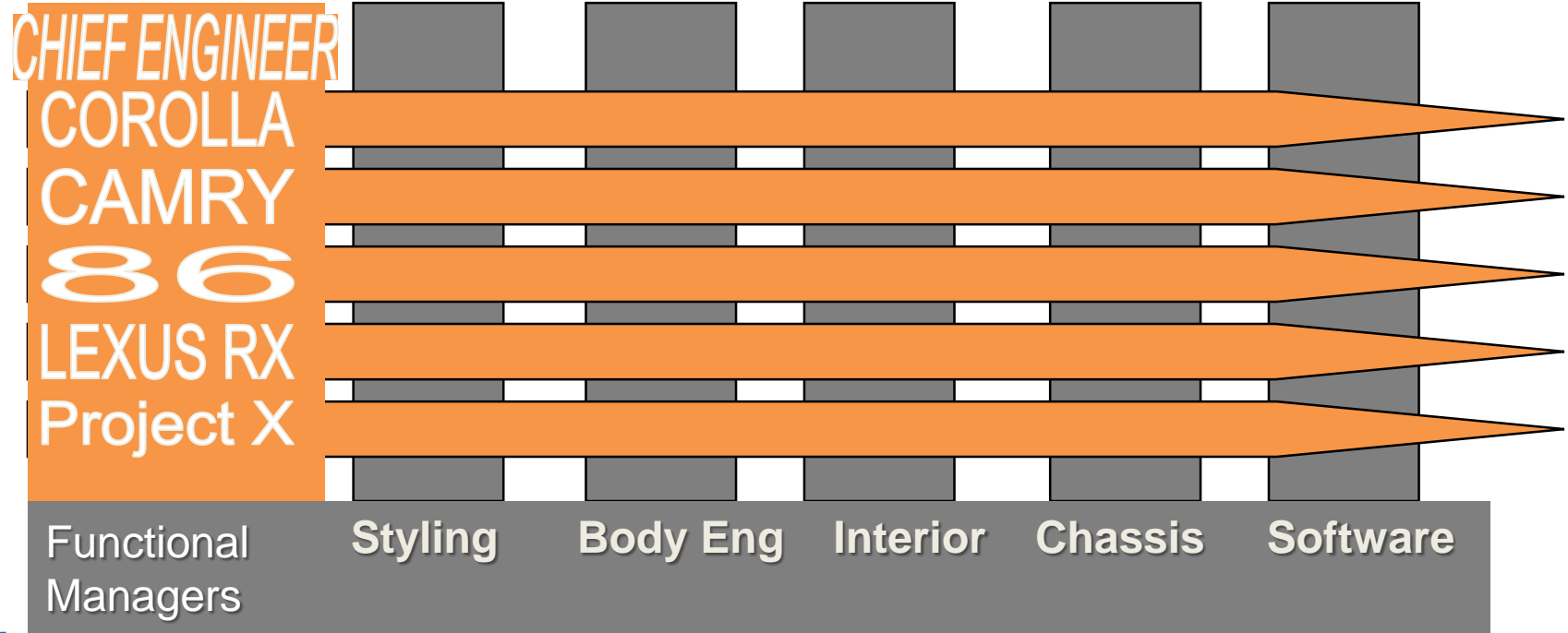
Innovation and Ownership, Responsibility and Authority

Getting people to innovate means getting them to think and take ownership.

How do you get people to think and take ownership?

- ***What discourages people from thinking and taking ownership?***

Important News

It's not just a matter of turning people loose.

- **And expecting or hoping that their natural goodness of creativity will emerge to carry forward your dreams.**

Nor is it a matter of ordering people to do your bidding.

Innovation and Ownership, Responsibility and Authority

- **In my five years in Toyota City, almost never was I given solutions.**

- **Yet, I was not free to just do wha I wanted.**

- **I was given clear responsibility t propose solutions to problems I owned.**

Solution

problems
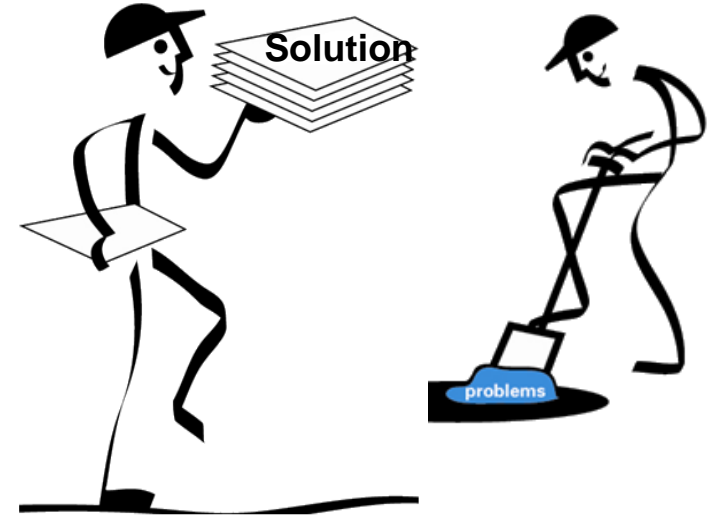
What happens when we tell people what to do?

1. We deprive them of the opportunity to think.

2. We take away responsibility/ownership.

3. They might do it (and you might be wrong!).

The Lean Leader's Challenge

- Make objectives, outcomes, assignments clear enough that they can approach the task with confidence.

- Yet, open enough that responsibility is not taken away.

- So they have clear responsibility to propose solutions with a sense of entrepreneurial ownership.

- → **Clear direction with full ownership**

Lean Management
Controlled Direction
with Adaptive Flexibility

- **This way of managing provides extraordinary focus, direction, "control."**

- **While at the same time providing maximum agility.**

- **This way of working can resolve the age-old dilemma that encumbers all large organizations: control vs. flexibility.**
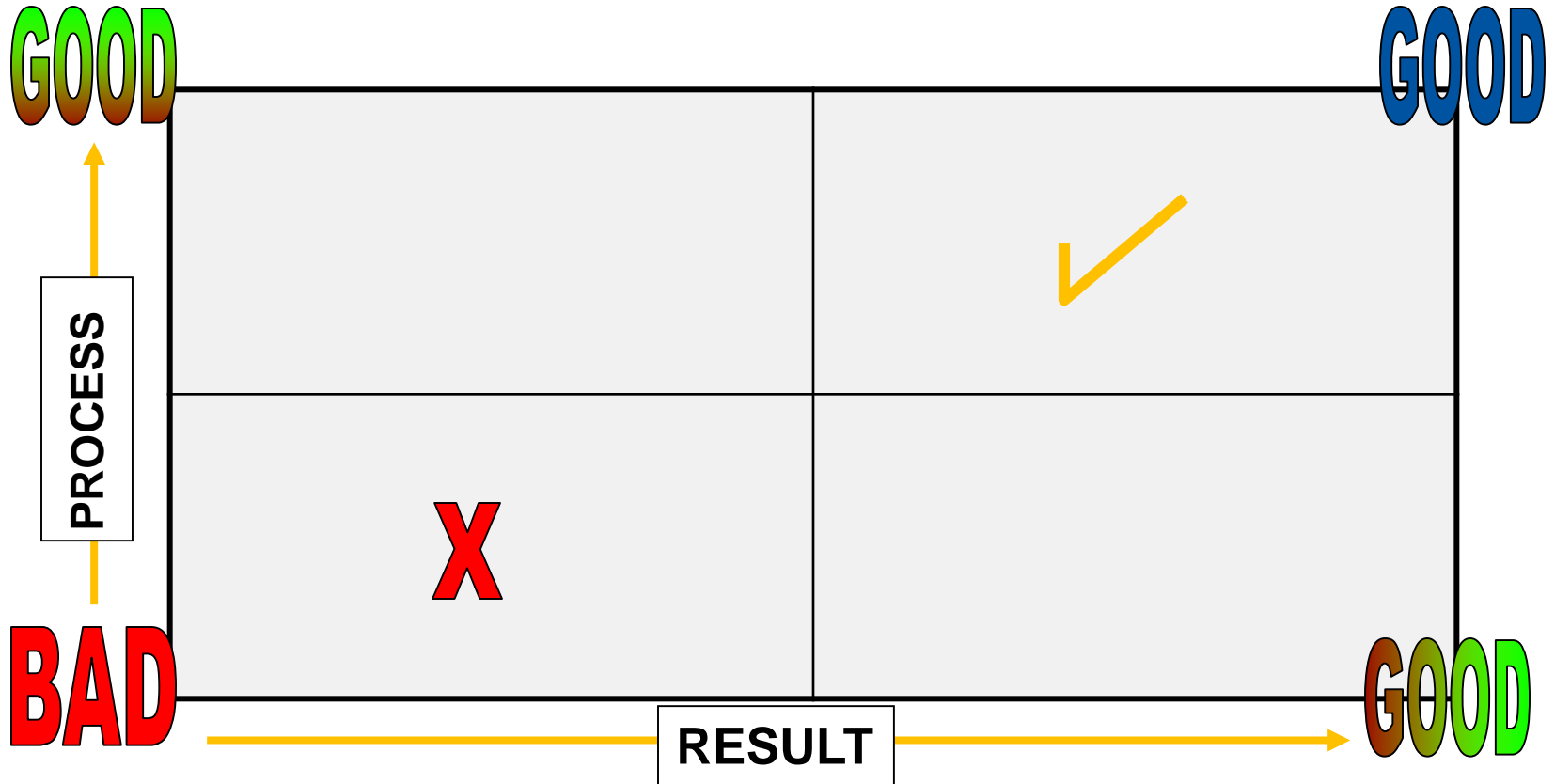
Each Leader as Chief Learning Architect of His or Her Own Area of Responsibility
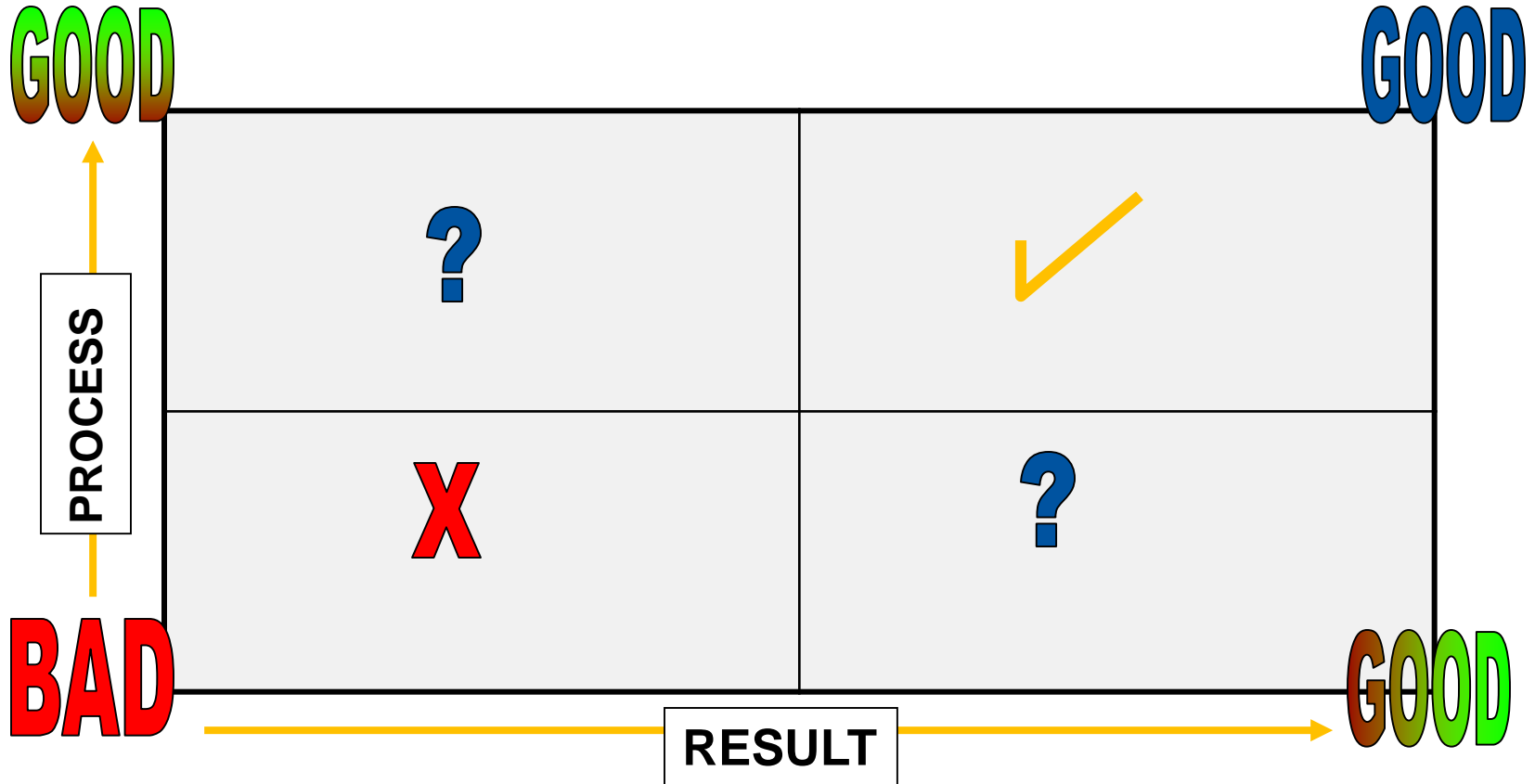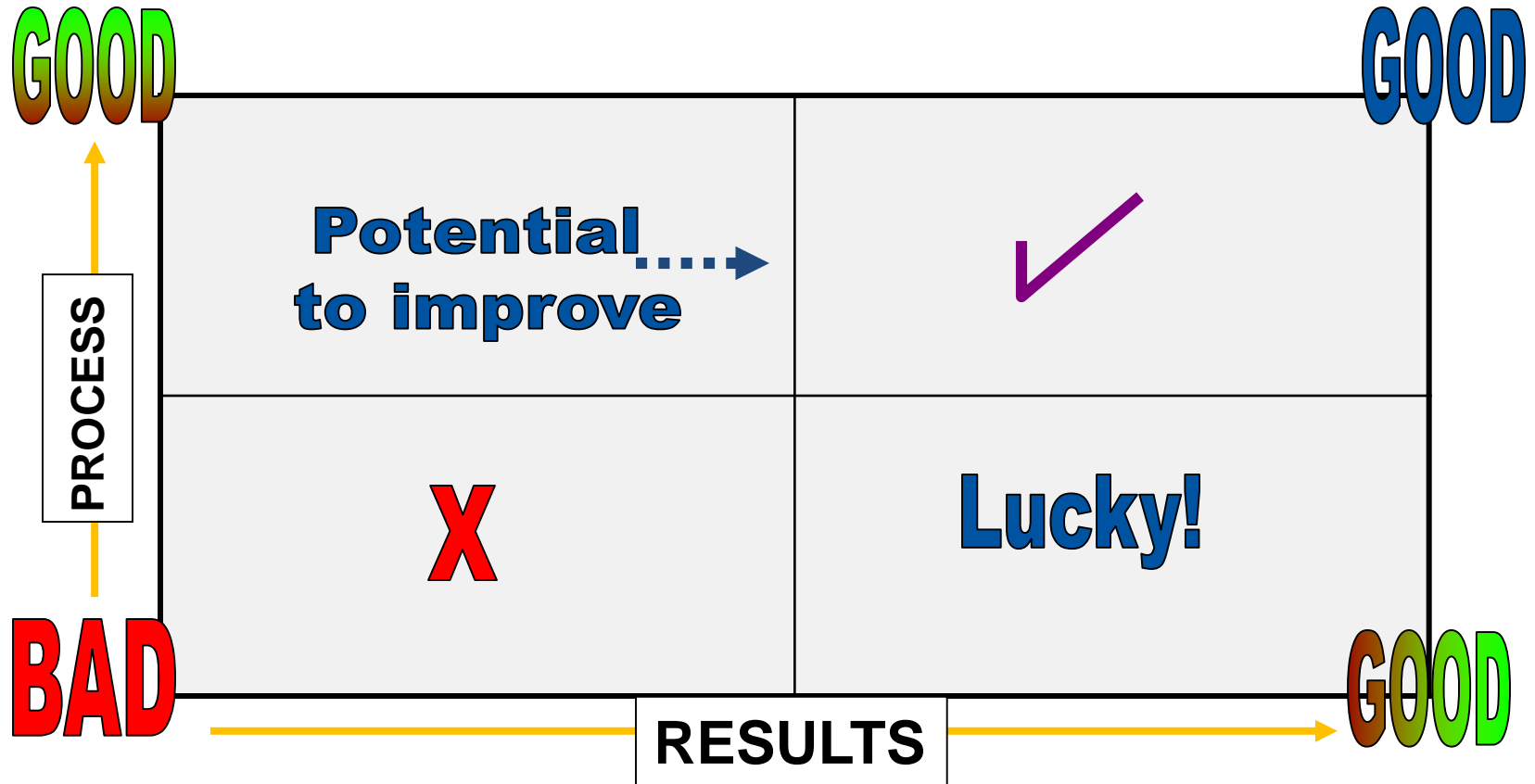
Result and Process

GOOD — GOOD

BAD — GOOD
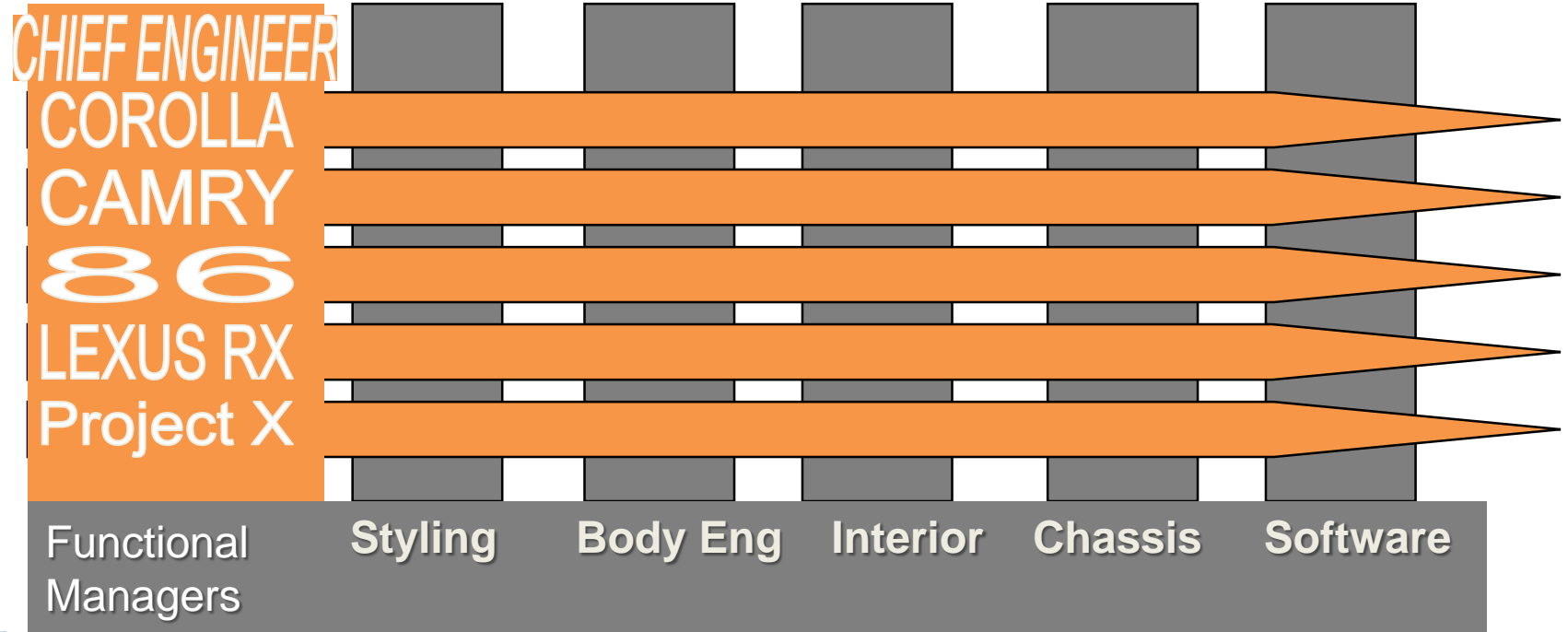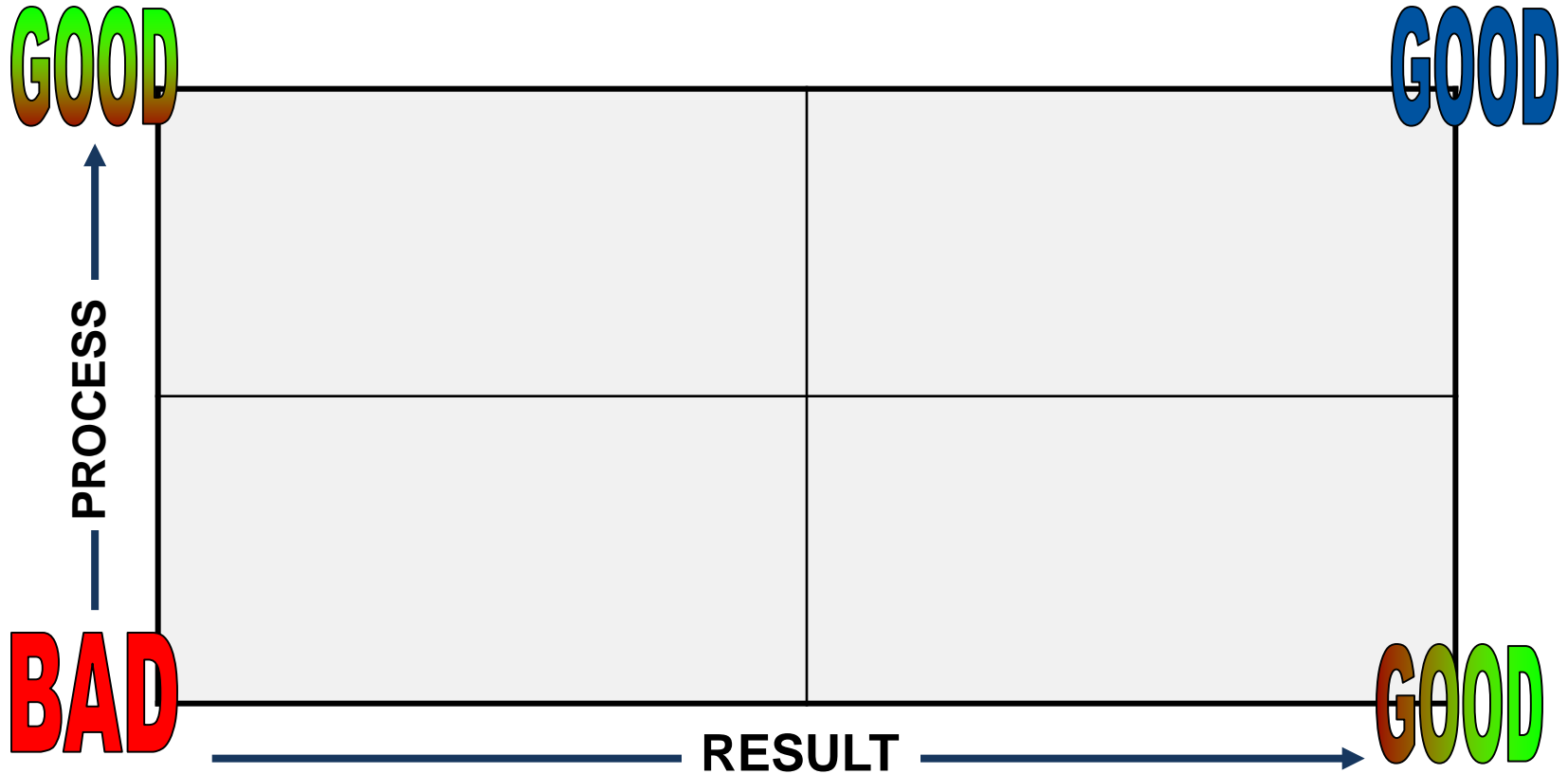
PROCESS

RESULT

Result and Process

Result and Process

Results and Process

Lean Thinking as Question Thinking

Types of questions, to be used in sequence:

- ❑ ***What***
  - • Grasp the Situation – What is happening?
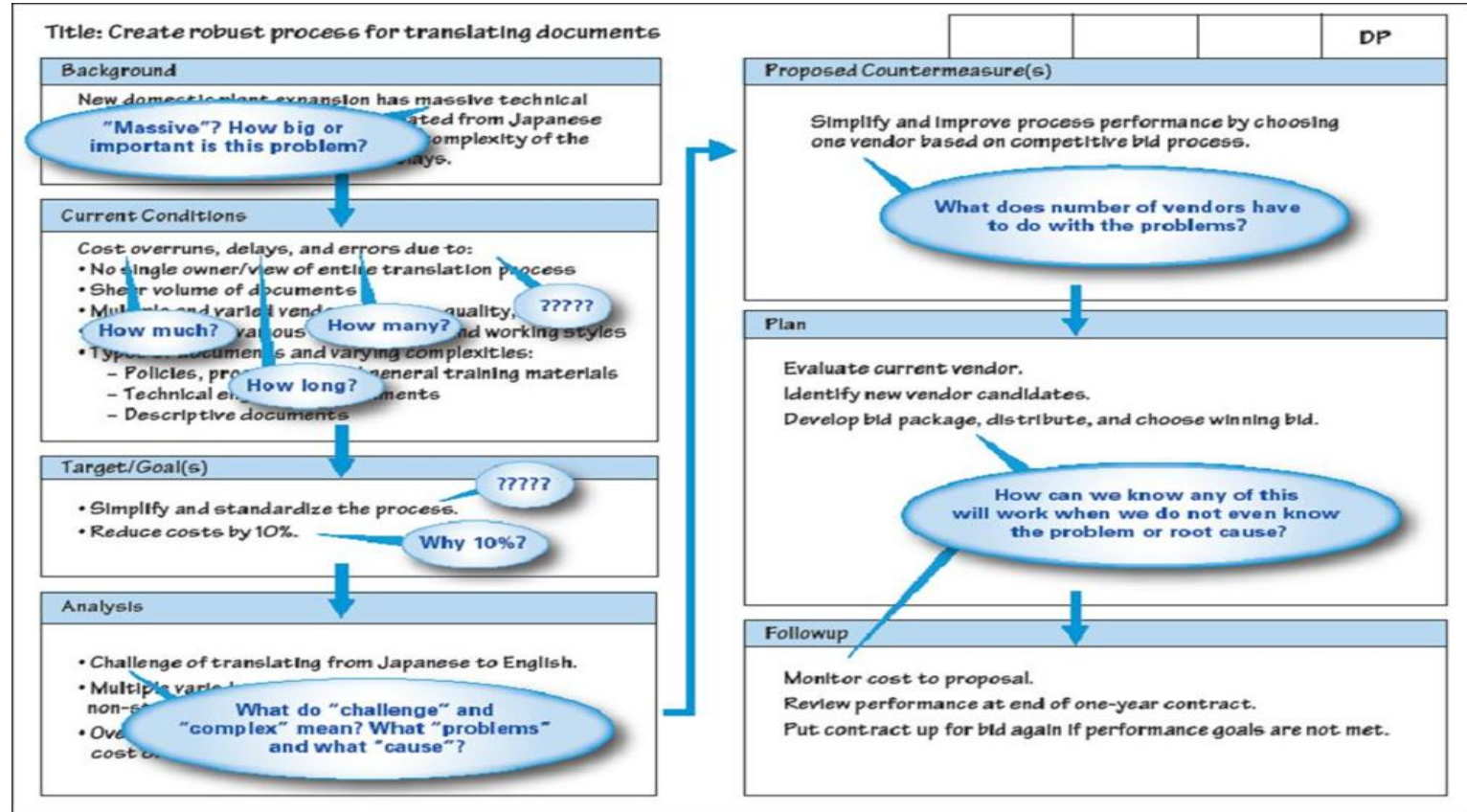- ❑ ***Why***
  - • Diagnostic – Why is it happening?
- ❑ ***What if…?***
  - • Prompting – What would happen if we tried…?
- ❑ ***Why not…?***
  - • Advocacy – Why not be bold?!

The A3 Process to Aid in Asking Better Questions

Same Questions, Different Sequence...

- Group#1
  - How happy are you these days?
  - How many dates did you have last month?

- Group#2
  - How many dates did you have last month?
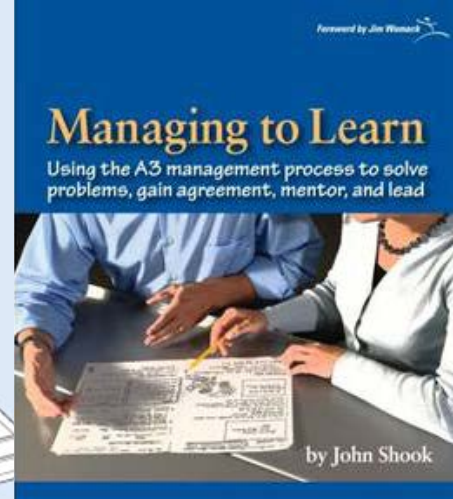 - How happy are you these days?
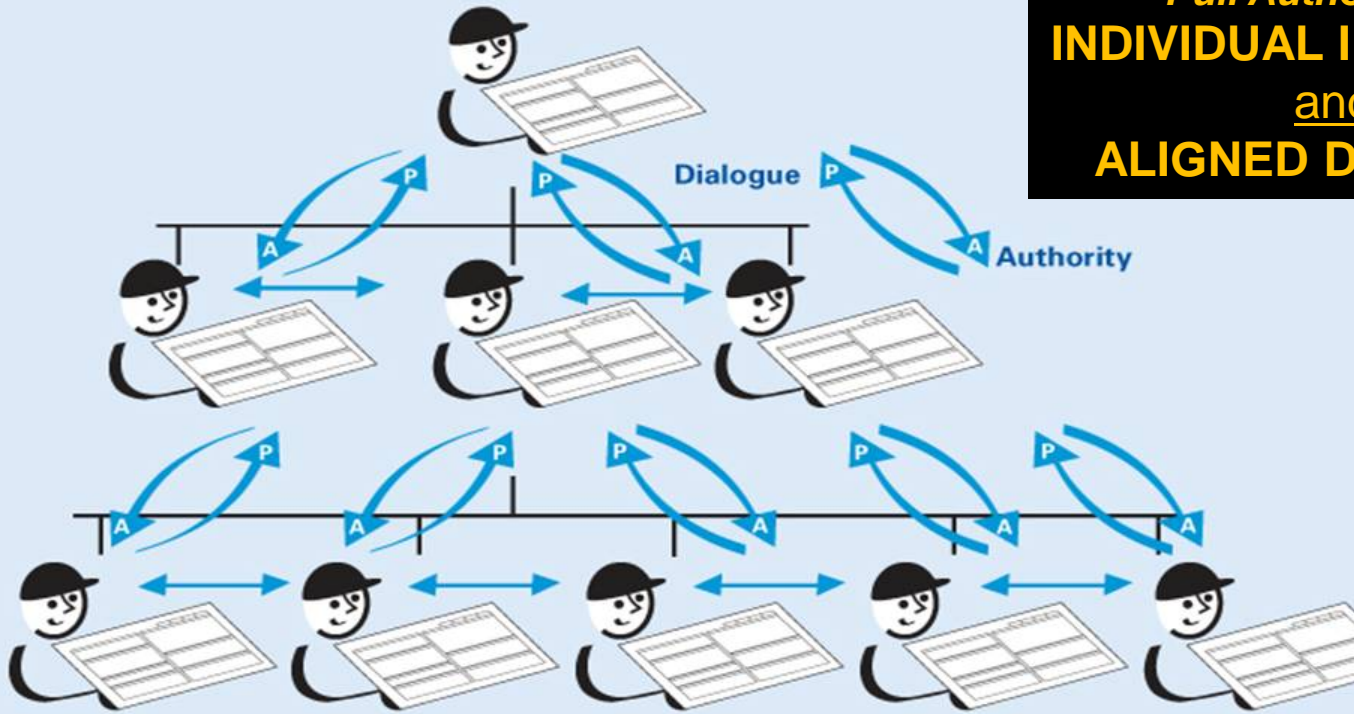
Responses?

Zero correlation   Highly correlated

Pull Authorization:
INDIVIDUAL INNOVATION
and
ALIGNED DIRECTION

Dialogue

Authority

Managing to Learn
Using the A3 management process to solve problems, gain agreement, mentor, and lead

by John Shook

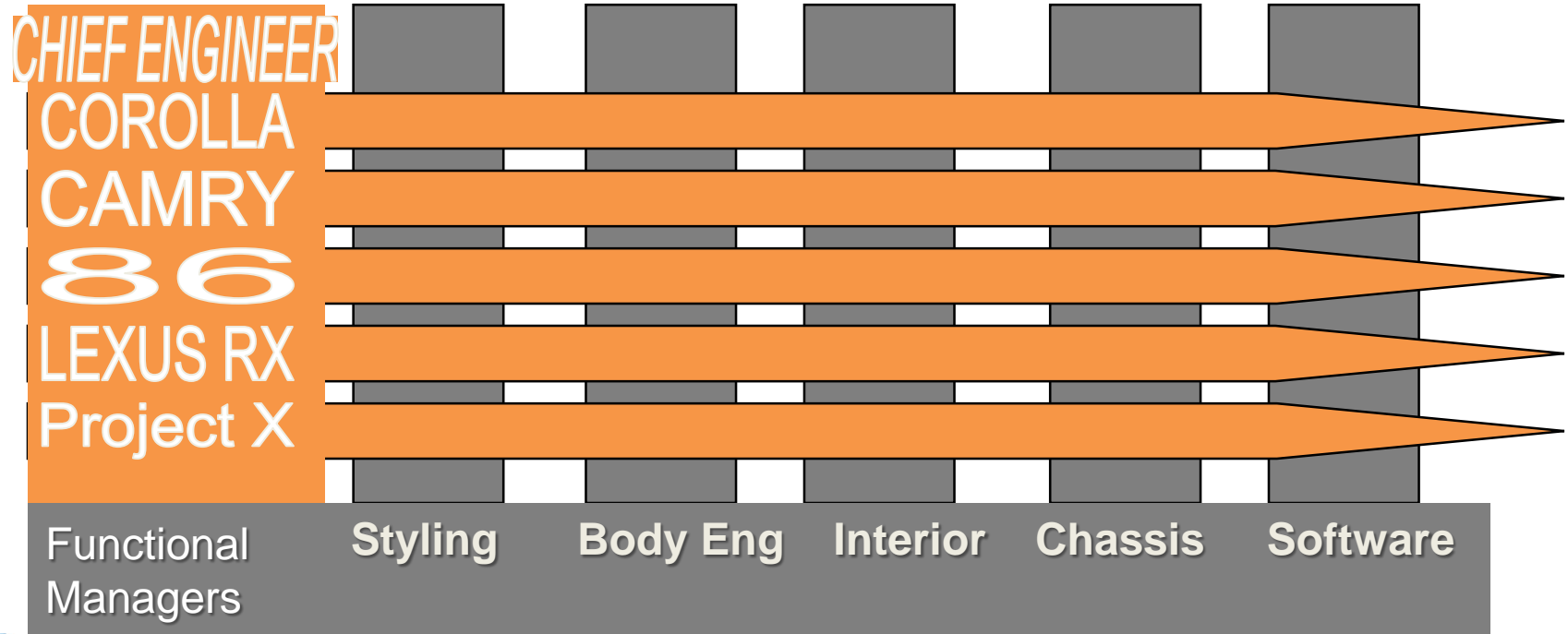**Initiative – Dialogue – Proposal – Authorization**

Lean Thinking as a Process of Endlessly Addressing a Set of Fundamental Questions
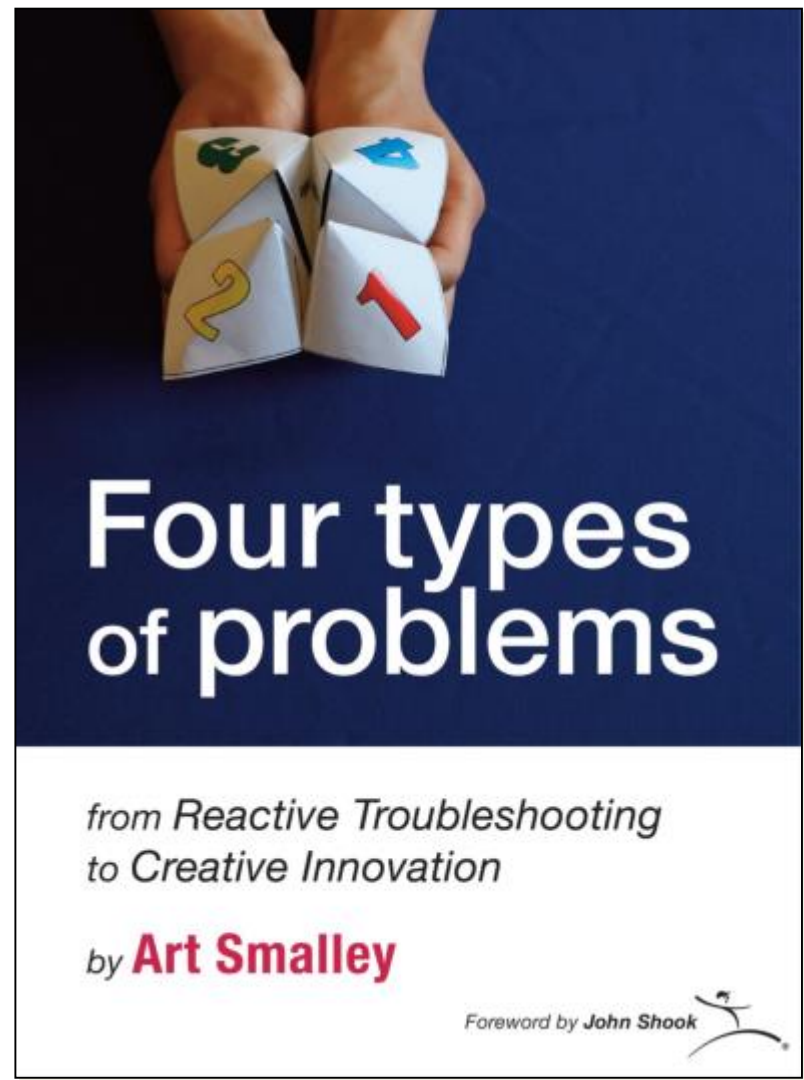
1. **What is our *purpose*, what *value to create,* or what *problem* are we trying to solve?**

2. **How do we *design, do, and improve* the *actual work*?**

3. **How do we identify and *develop the capabilities* we need?**

4. **What *management system* and *leader behaviors* are required to support the new way of working?**

5. **What *basic thinking, mindset* or *assumptions* underlie this transformation?**

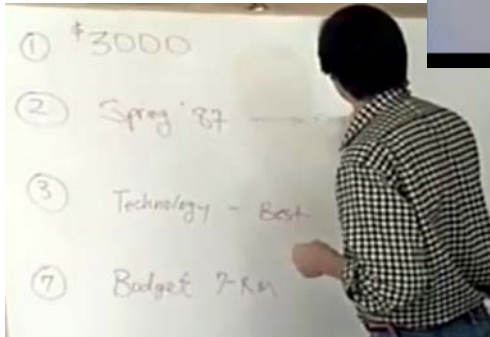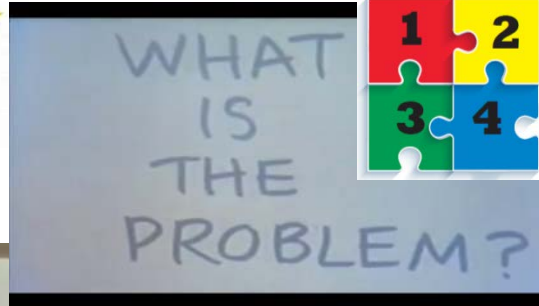**What to do, why, and how to do it**

Each Individual as Chief Learning Architect of His or Her Own Area of Work

CHIEF ENGINEER
COROLLA
CAMRY
86
LEXUS RX
Project X

Functional Managers

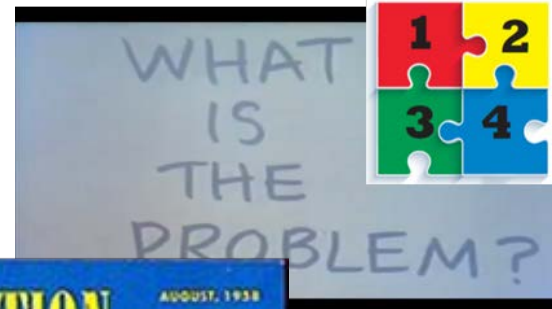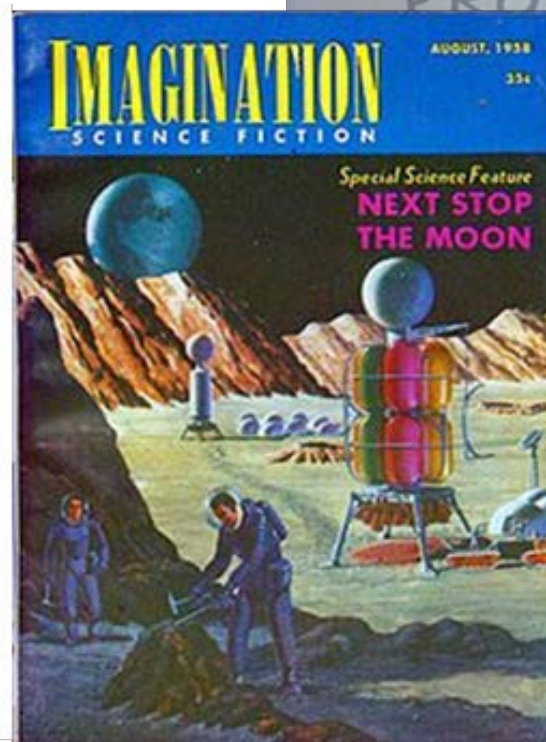Styling   Body Eng   Interior   Chassis   Software

69

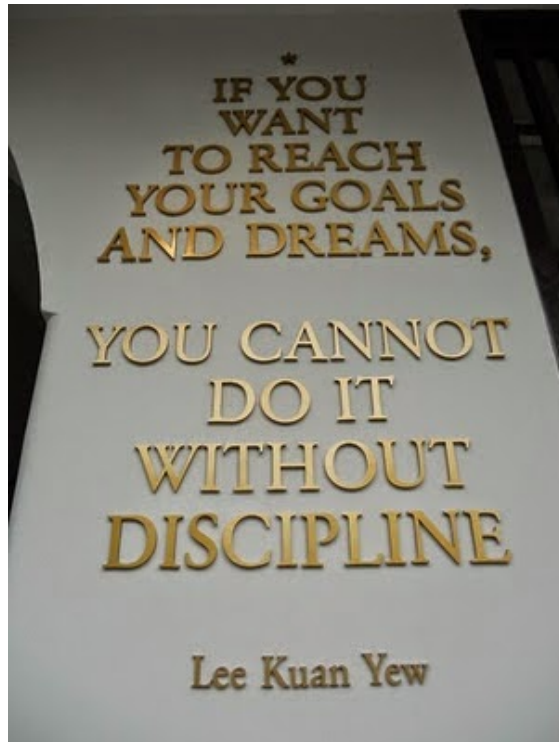**But, there are differences in solving different types of problems and in designing or leading different types of work**

Four types of problems
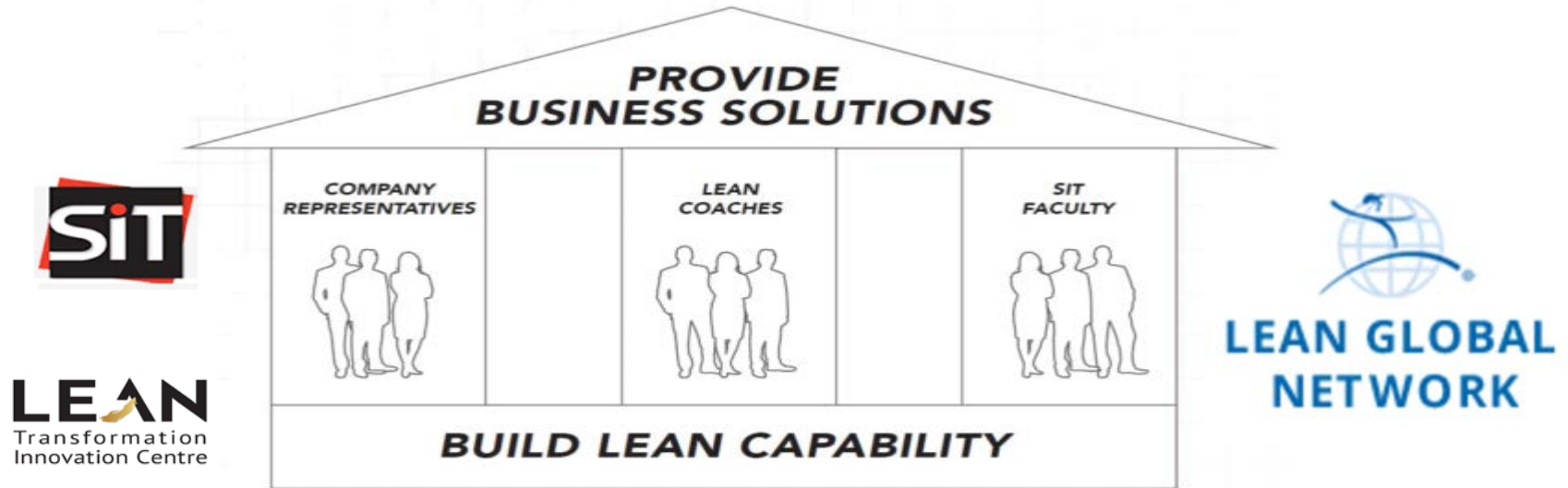
from *Reactive Troubleshooting to Creative Innovation*

by **Art Smalley**

Foreword by *John Shook*

Troubleshooting – RCA – Target Condition – Emergent

WHAT IS THE PROBLEM?

IF YOU WANT TO REACH YOUR GOALS AND DREAMS, YOU CANNOT DO IT WITHOUT DISCIPLINE

Lee Kuan Yew

OMEGA Speedmaster PROFESSIONAL

WE CHOOSE TO GO TO THE MOON

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