

History

WHAT IS “LEAN”

What is “lean?”

- **October 1973**

- OPEC oil embargo triggers steep decline in auto sales.
- All auto companies suffer. Toyota, alone, remains profitable.

- **June 24th, 1980**

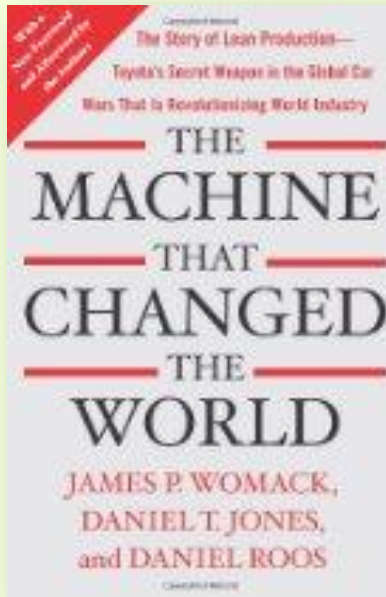
- NBC airs “If Japan Can, Why Can’t We?” a documentary on Japanese manufacturing quality.
- Deming becomes famous, TQM starts to take hold.
- People start to *study Japanese production.*

What is “lean?”

1980's

- Productivity Press starts to publish translated works by Japanese authors.
- Various authors and consultants referred to:
 - “Just-in-time” or JIT
 - “Japanese manufacturing techniques”
 - “kaizen” or “kaizen events”
 - “kanban”
- They mostly referenced the tools or observable aspects of manufacturing.

What is “lean?”



1990 – The term “Lean Production” was used to describe Japanese automobile production in *The Machine that Changed the World*.

This best-selling book put the term “lean” into business vernacular.

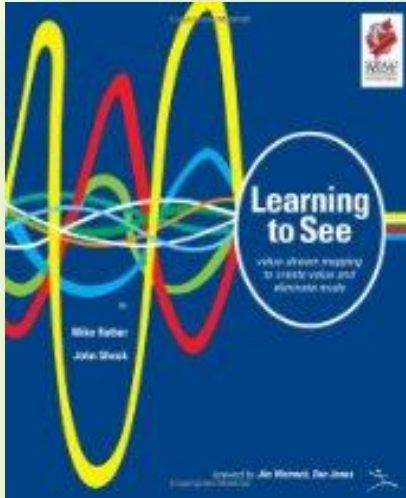
However, it was still largely limited to describing observable aspects of the system – through the eyes of engineers.

What is “lean?”

1990's

- Shingijutsu's U.S. client base expands.
 - Focus on 5-day kaizen events.
 - Consultants deal mostly with professional practitioners.
 - Most attention is on technical implementation.

What is “lean?”



1998 – The newly formed Lean Enterprise Institute (LEI) publishes *Learning to See*.

The chapter titled “What makes a value stream lean?” describes a observable practices and techniques.

Takt Time

Supermarket
pull systems

Production
Leveling
(heijunka)

Reduce lot
sizes – strive
to produce
“every part,
every day”

Continuous Flow
(one-piece-flow)

A “pacemaker
process?”

Pull at the
pacemaker

What is “lean?”

1999 – Steven Spear publishes his PhD research, summarized in *Decoding the DNA of the Toyota Production System* in the Harvard Business Review.

- Spear’s key finding was that the “tools are not fundamental to the Toyota Production System.”
- He finds consistent patterns in the way Toyota structures activates (people’s work); connections (information flows); pathways (material flows); and problem solving.

His work goes largely unnoticed by the consulting community.

What is “lean?”

2001 – 2005 The Lean Enterprise Institute publishes a series of follow-on workbooks describing technical tools and techniques.

2004 - Jeff Liker begins writing about Toyota's *culture*.

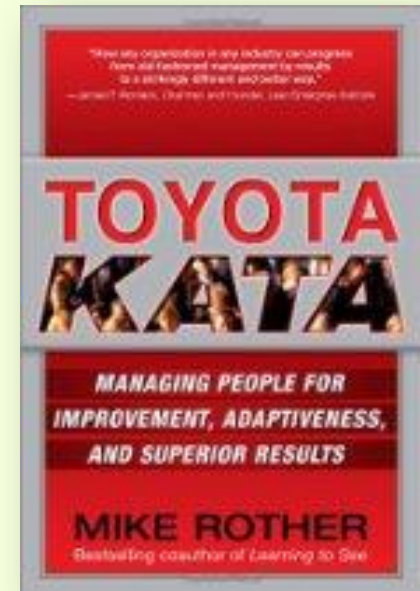
Meanwhile “Lean” takes off as an industry for consultants and authors.

There is no formal definition of what “lean” means. The definition fragments.

What is “lean?”

2010 - Mike Rother builds on Spear's research with *Toyota Kata*.

He describes fundamental management practices and behaviors, and presents them as *learned skills*.



What is “lean?”

Today we have:

Toyota Culture
– 14 principles

“Agile” as something the same...
or different

“Lean” just means
eliminating waste”

Lean ERP

“What would Toyota do?”

“Lean” is just
“common sense”

Applying specific “lean tools”

“Efficiency”

Lean Accounting

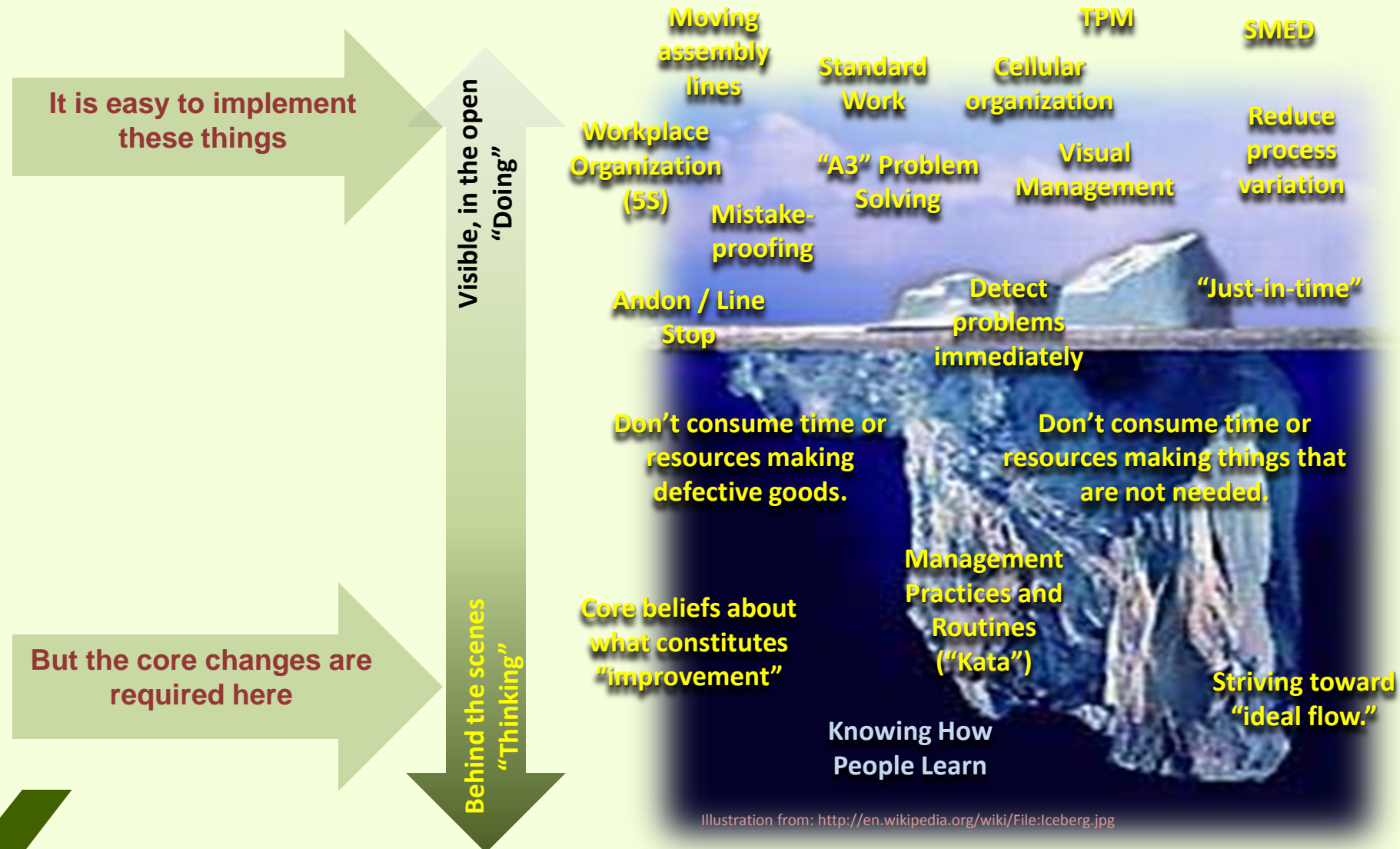
“A3 Problem Solving”

Lean Sigma

So where are we? What *is* “lean?”

- There is no formal definition of “lean” or even of Toyota’s management system.
- We learn about it through discovery and research.
- As we learn more, our models (should) adjust.

What Is "Lean?" This is what we know today.



Application

Based on this knowledge, we can develop elements that would be present in a “lean enterprise.”

Six Leadership Elements

1. **Set and hold a consistent long-range direction:** “True North.”
2. **Take ownership of improvement** by setting challenges and targets that establish direction and focus efforts.
3. **Take keen personal interest in *how* problems are solved.**
4. **Insist *and check* that processes are deliberately designed to surface problems immediately.**
5. **Ensure formal processes to *immediately* respond to problems and rapidly clear them.**
6. **Ensure formal processes to *manage* problem solving as part of regular work.**

Let's discuss each of these in turn.