



ISE 362 – Lean Kaizen – A3 – Learning Organizations



İzmir University of Economics

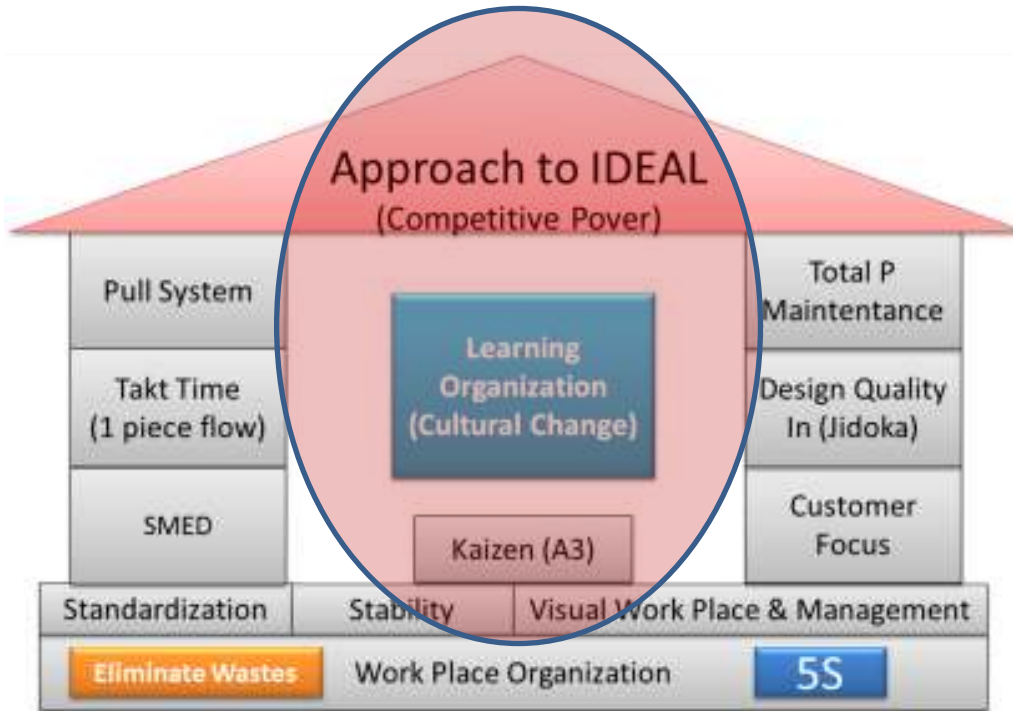
Halil POSACI

2012, İzmir



Agenda

Kaizen – A3 – Learning Organizations





Kaizen

Continuous Improvement



- Zero cost, infinite customer satisfaction..
 - If everything run smoothly
 - Break it again
 - That is good now. Let's do it better.





Continuous Improvement

Learn From Others

- Steal shamelessly
 - But respect copyrights
- Quality portal
 - Share between employees
- Quality awards

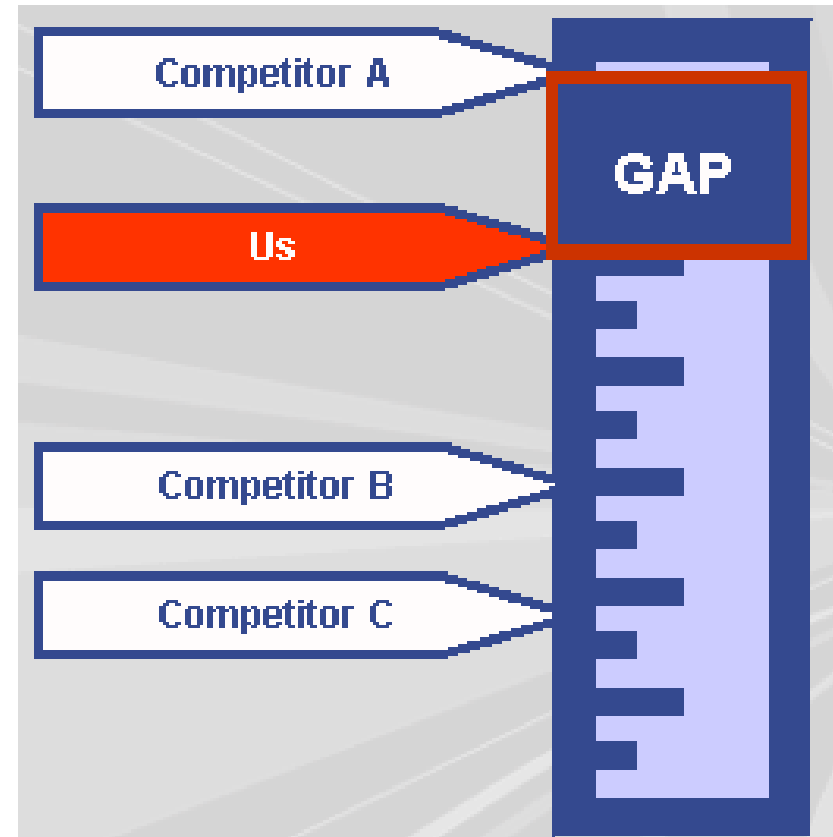




Continuous Improvement

Learn From Other Organizations

- Learn from media
- Plan visits
- Use common consultants
- Compare by ratios and charts





Continuous Improvement

Learn From Other Organizations

- Learn from award processes





Continuous Improvement

Learn From Other Organizations

- Local companies
 - Share ideas
 - Explore common problems
- Web rings
 - You may share and discuss ideas with colligates





Continuous Improvement

Good Enough --- Isn't

- Examine value streams regularly
 - Few times/year informally
 - Once/year formally
 - If waste crap back
 - According to new customer requests
- Adopt PDCA mindset

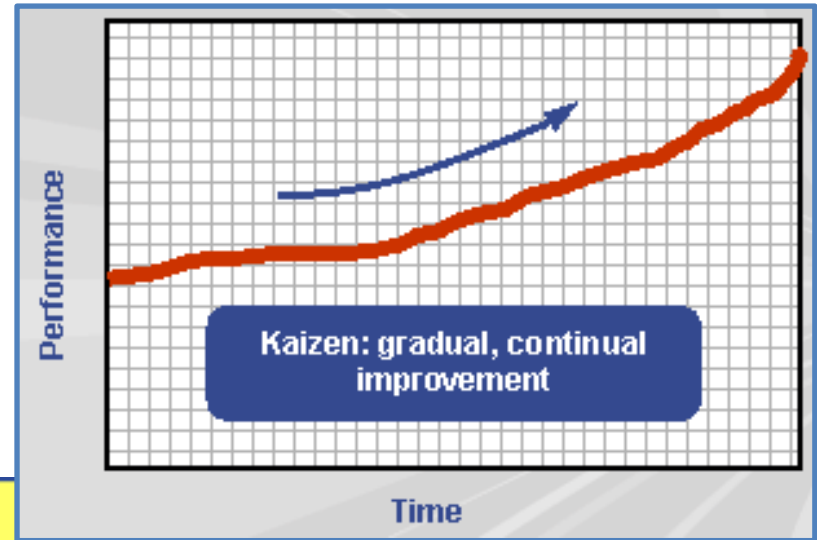




Continuous Improvement

Employee Involvement

- Employee involvement
 - Everyone should be responsible to look for wastes



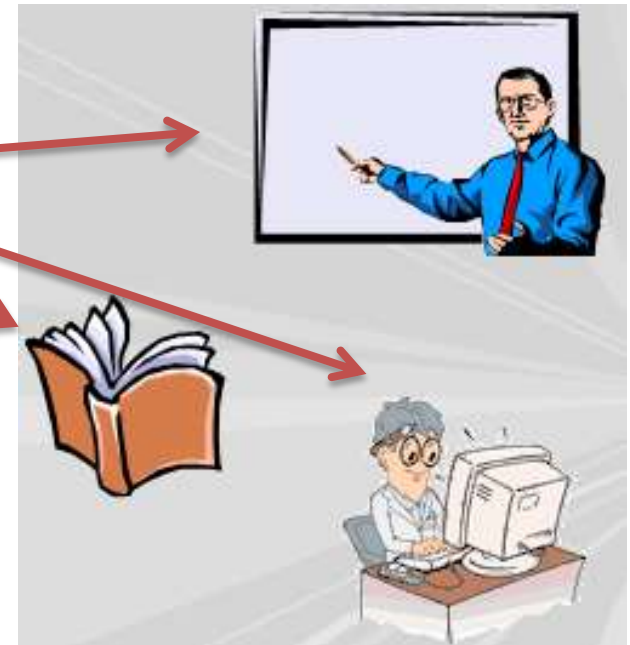
The 7 Wastes	Some Related Questions
1. Waiting	Can some tasks be done in parallel rather than in series?
2. Transportation	Can the process be configured to move product to the next operations (rather than have people do the moving)?
3. Processing Itself	Can some tasks be combined or eliminated?
4. Motion	What aids, such as fixtures, new equipment, or special tools, could speed up the process?
5. Poor "Quality"	Where can mistake-proofing be used to eliminate or reduce errors or rework?
6. Inventory	Is WIP (inventory) needed just-in-case or can we operate without it?
7. Overproduction	Can the operation produce to order rather than produce for inventory?



Continuous Improvement

Employee Involvement

- Motivate by freedom
- Train and educate
 - Use different methods





Continuous Improvement

Develop Lean Experts



➤ Lean Leader

- Supportive Leaders
 - 5S
 - VSM
 - SMED
 - TPM
 - Other
- Cell Leaders

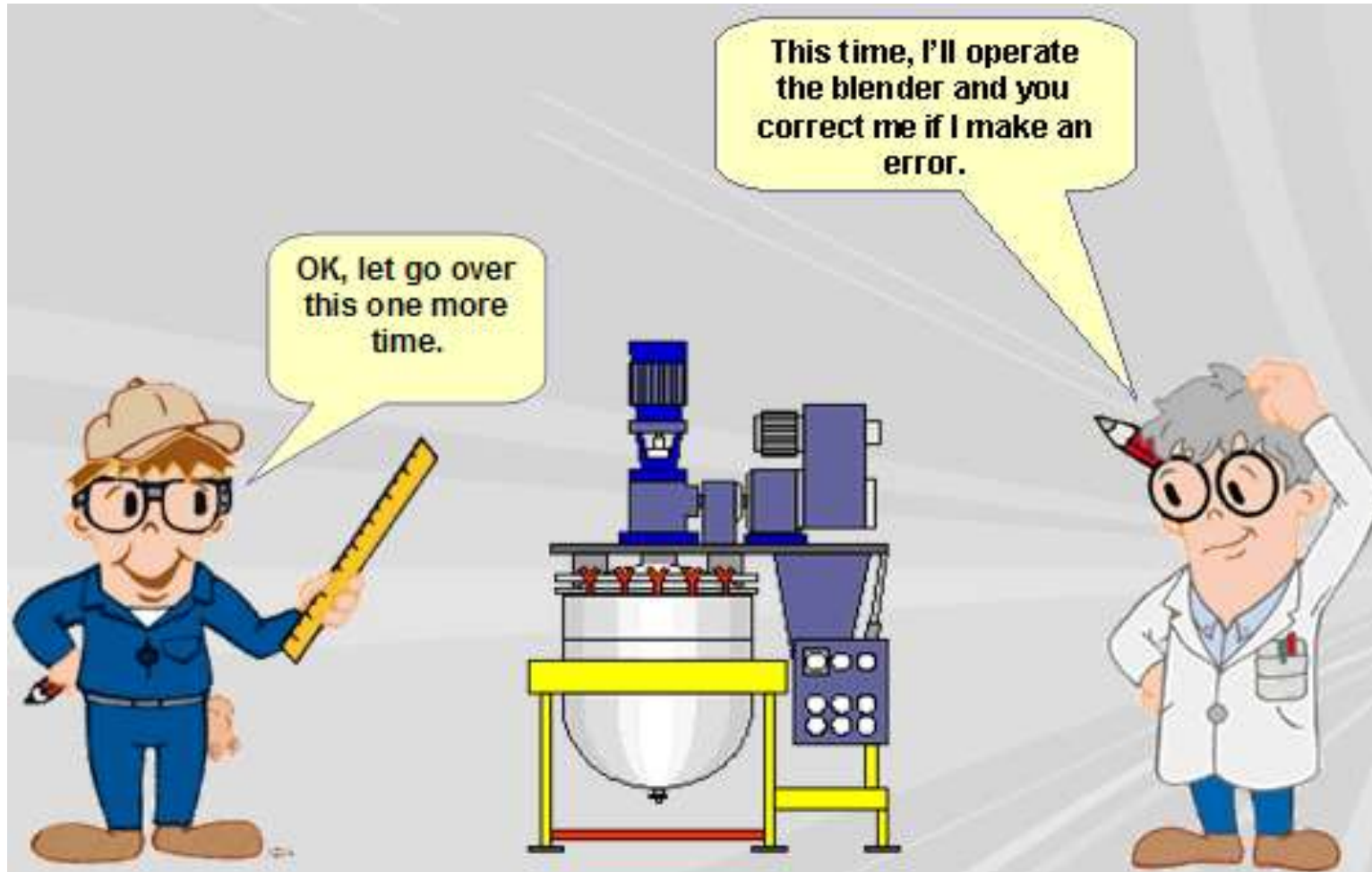
Train them
Be in Contact
Give them authority and responsibility





Continuous Improvement

Cross Training - Flexibility





Lean Starts with people

Who Does the Job?

- Value Stream mapping
- Improving workflow
- Workplace organization
- Developing
 - Robust Processes
 - Quality products or services
 - Less waste





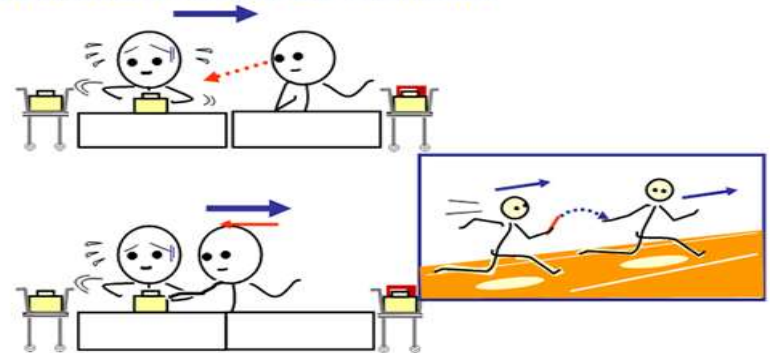
Lean Starts with people

- Team work
- Free work environment
 - Blameless and seamless
 - Can do attitude
 - Responsive to all customers

Without Mutual Assistance Teamwork



With Mutual Assistance Teamwork





Lean Starts with people

- Know who your customer is.
 - Internal customer (Next process step)
 - External customer (Agency)
 - Ultimate customer (Final user)
- Know what your customer wants.





Lean Starts with people

- Flexible and Adaptable – Like a Sports team





Force to use data within A3

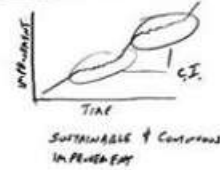
PROBLEM STATEMENT

- CONTINUOUS IMPROVEMENT IS HINDERED BY:
- LACK OF STANDARDIZATION
 - PROJECT DIVERSITY (INNOVATIVE SINGLE SIGHTS)
 - LACK OF EXPERIMENTATION
 - FOCUS ON SOLVING BIG PROBLEMS

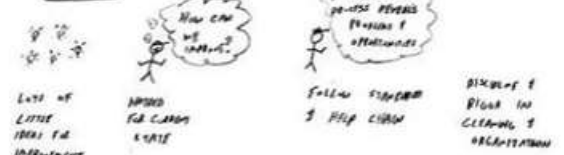
BACKGROUND

- HQs
- Go SEE
 - Continuous IMPROVEMENT EVERYDAY EVERYDAY
 - PEOPLE ARE ACT
 - S, Y, & APPROVE TO CURRENT DECISIONS

TARGET STATE



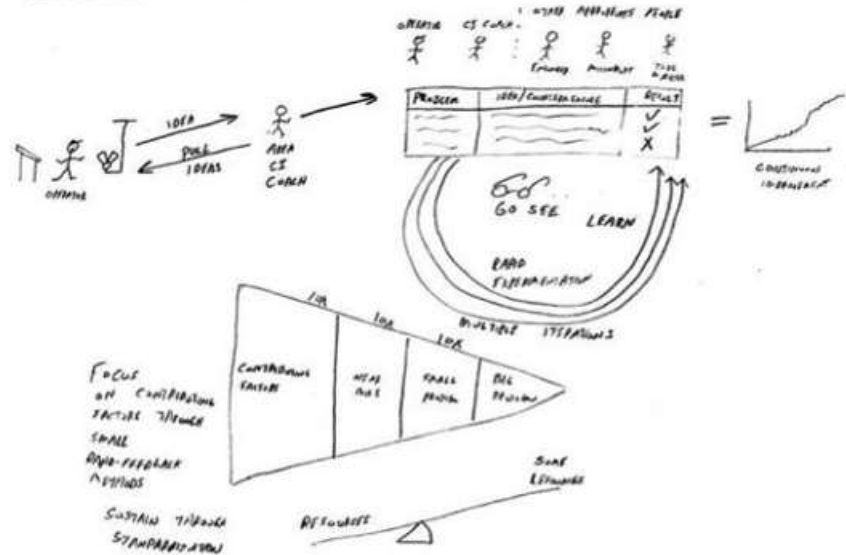
REALITY



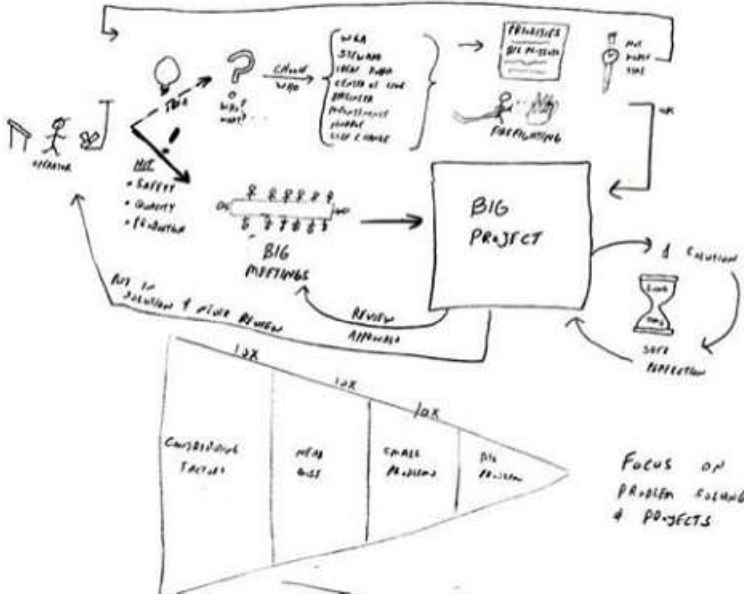
CURRENT STATE



CONTINUOUS IMPROVEMENT PROCESS



TYPICAL IMPROVEMENT PROCESS



IMPLEMENTATION PLAN

1. IDENTIFY STATUSES
2. OBSERVE & NOTE VARIABLES & MEASUREMENTS
3. IMPLEMENT OPERATIONS
4. SS STATUSES
5. DESIGN VISUAL WS + MANAGEMENT BOARD
6. ITERATE TO OTHER STATUSES



Force to use data within A3

Reference

Reference





Force to use data within A3

When To Use

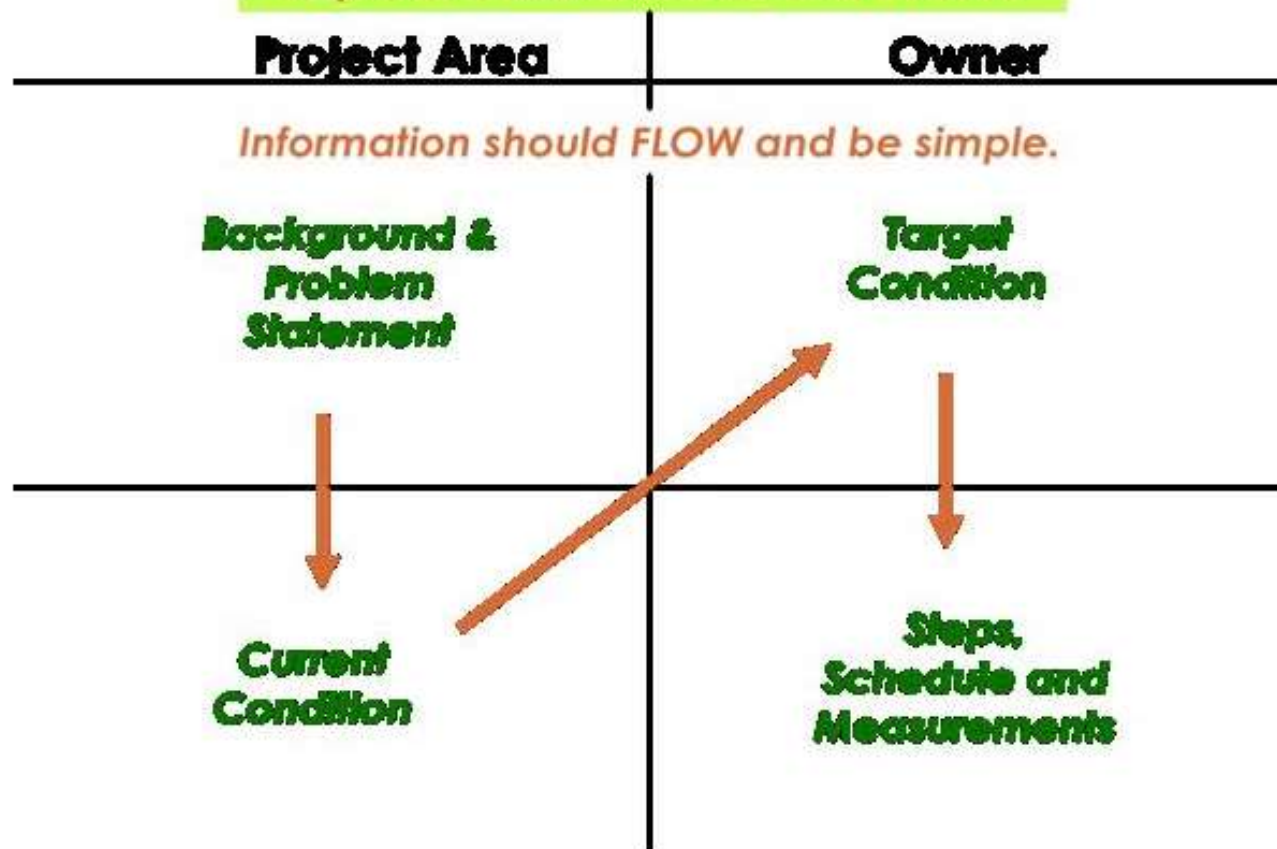
Do When:	Don't When:
<input type="checkbox"/> Collaboration in thinking is required	<input type="checkbox"/> You already know the solution
<input type="checkbox"/> You need to make your or someone else's thinking more visible	<input type="checkbox"/> You think you know the solution and just need to test it
<input type="checkbox"/> You have a knowledge gap	<input type="checkbox"/> To force fit your work into a report for credit



Force to use data within A3

What Is A3 ?

The A3 is a method to structure, capture, communicate, and coach.





Force to use data within A3

What, Why / Steps, Schedule

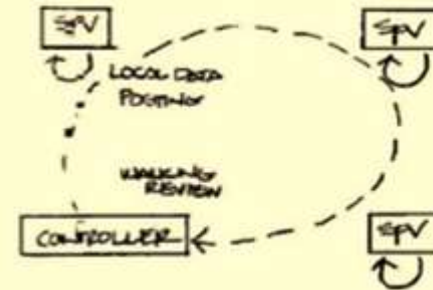
BACKGROUND (WHAT)

↳ DIFFICULTY IN HOW TO PROCESS & REVIEW OPERATIONAL DATA

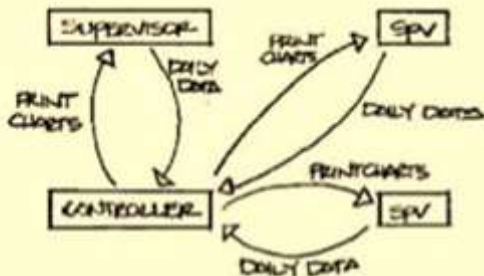
BUSINESS CASE (WHY)

- ↳ IMPORTANT TO STAY ON TOP OF OPERATIONAL DATA
- ↳ WASTE OF PAPER & PROCESSING TIME
- ↳ LACK OF OWNERSHIP OF OPERATIONAL MEASUREMENTS

TARGET CONDITION



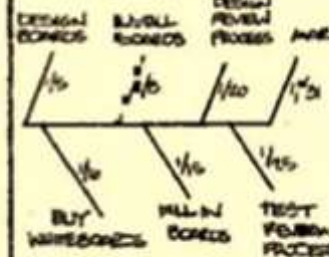
CURRENT CONDITION



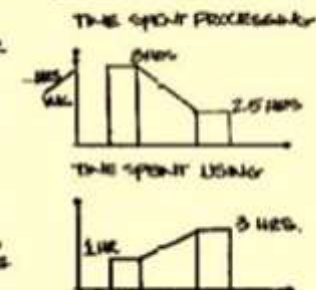
STRATEGIC STEPS

- ↳ DESIGN MEASUREMENT SCHEDULE
- ↳ DEVELOP REVIEW PROCESS

SCHEDULE



MEASUREMENT





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Force them to search in Gemba



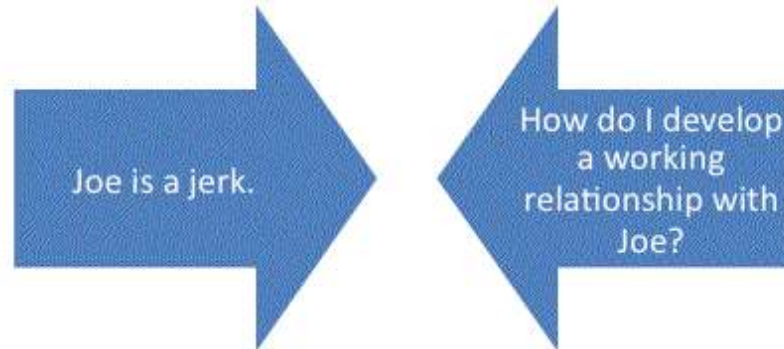
Go to Gemba & Communicate to understand Reality.



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Quadrant 1: Problem Statement

What is the real problem?
Why?
How?





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Quadrant 2: Current Reality

- What do I need to learn?
- What should I measure?
- Is it reasonable to bother?



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Quadrant 3: Developing A Target Condition

- Setup team completed
- Problem defined very clearly including measures

THEN

- Describe the condition where problem is removed.
- Question everything again and again when doing.



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Quadrant 4: Turning Thinking Into Action

Who? What? When?

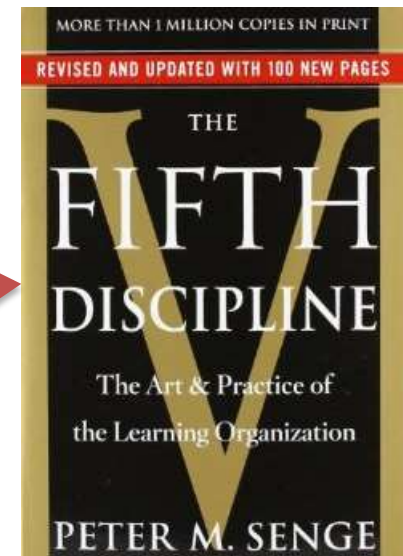


Measure and Standardize



Management

- Lean is not only a group of techniques
- But a Philosophy, a Culture to be inserted into the “company – organization – institution”





Classwork / Homework

Create a real A3 work

- It can be from your project area
- It can be about software development
- It can be about a part of your own life

You may work alone or in teams of two.

If your team is more crowded you may do two works in the same work place.

Please work on a real A3 with pencil and eraser. Do not print or type. Do not use ink pen.