



LEAN IN NORGES BANK

CAMBRIDGE UNIVERSITY, SEPTEMBER 18TH 2019

Odd Sønning, *Head of Continuous Improvement and Leadership Development*

AGENDA

- WHAT IS LEAN?
- LEAN IN NORGES BANK
- STRUCTURED PROBLEM SOLVING (A3)
- SUM UP



OUR GOAL IS

**CONTINUOUS IMPROVEMENT AS A
NATURAL PART OF THE WORKING DAY**



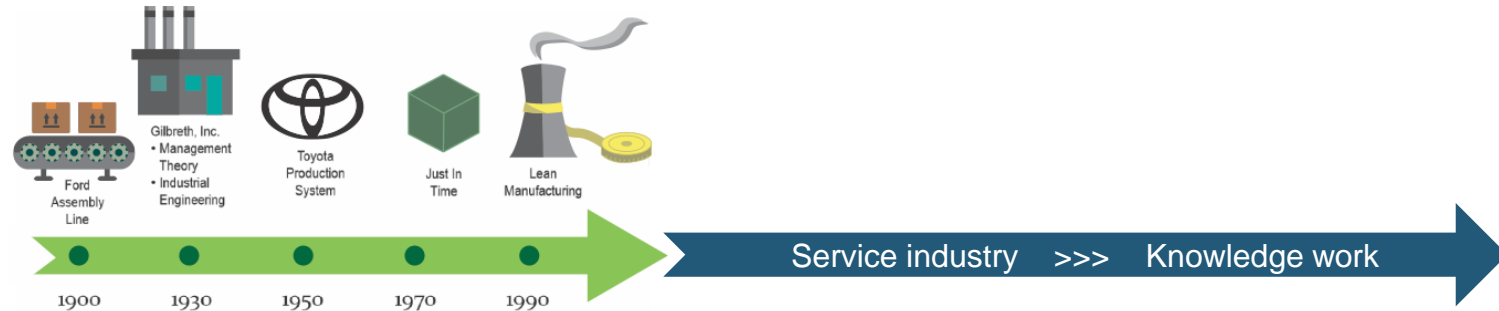
***CONTINUOUS IMPROVEMENT IS
BETTER THAN DELAYED PERFECTION***



WHAT IS LEAN?



Where does «Lean» come from?



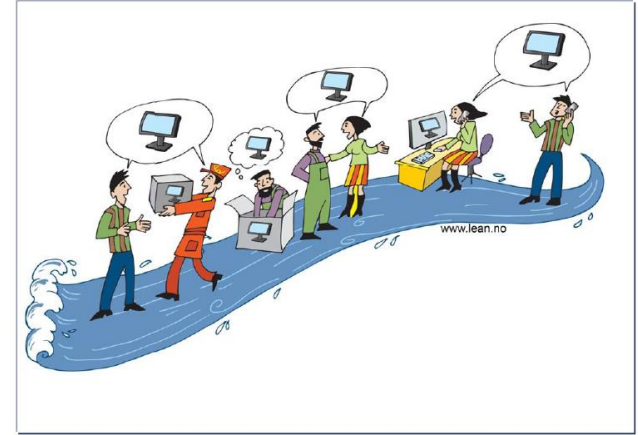
Taiichi Ohno

- Travelled to USA
- Mass production did not fit Japan
 - Marked size
 - Customers wanted variation
 - Lack of resources (people and material)
- «Discovered» the US Super Markets «pull»-strategy for items and variation with focus on minimal «waste»
 - Deming thought Japanese leaders quality control in the 50s
- «The West» studied what the Japanese did right to become market leaders and named it LEAN (Womack et al. 1990. «The machine that changed the world»)

The 5 principles of LEAN thinking

improvement through continuous elimination of waste

1. Define customer value
2. Define the value chain/process
3. Create «flow» in the process
4. Pull from the customer and backwards
5. Work for perfection



Customer value



”The time from the customer places his order until we get the payment in our hands.

Our goal is to reduce this timeline by reducing non value adding work»

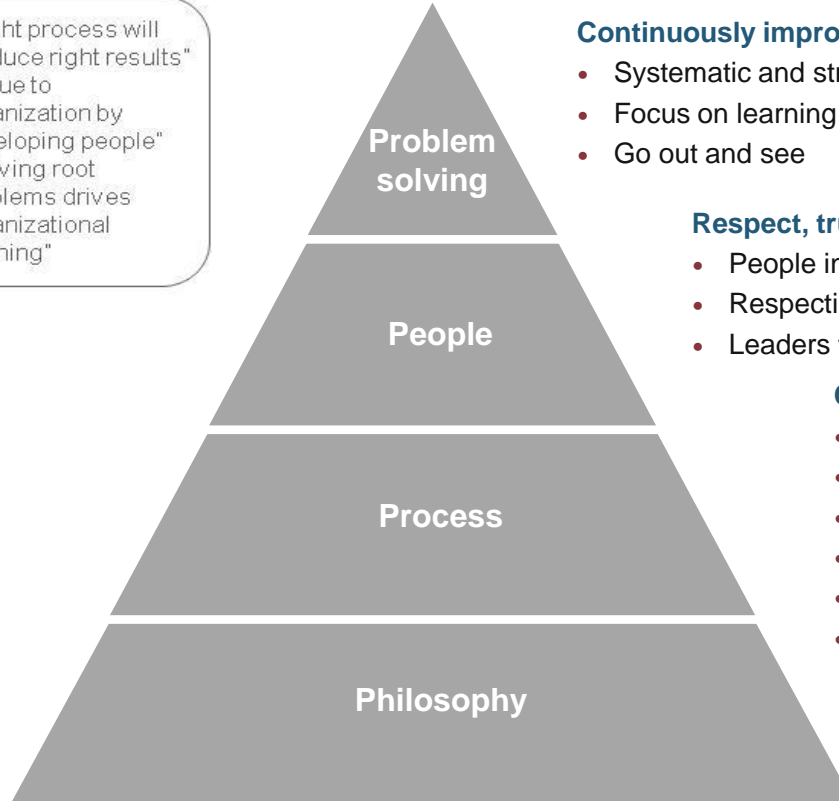
Taiichi Ohno, the founder of Toyota Production System

Toyota's 4 P's



Kiichiro Toyoda
- Founder of Toyota

- "Right process will produce right results"
- "Value to organization by developing people"
- "Solving root problems drives organizational learning"



Continuously improvement and learning

- Systematic and structured problem solving
- Focus on learning
- Go out and see

Respect, trust, challenges and development

- People involvement
- Respecting and trusting the employees
- Leaders that support and coach

Create the perfect/ideal process

- No waste
- Produce on demand
- Immediate response
- «One case» vs multi-tasking
- No errors
- Safe

Long term thinking

- Focus on customer value vs cost focus
- Focus on long term potential vs short term gains



7+1 waste categories



Talent

Underutilizing people's talents, skills, & knowledge.



Inventory

Excess products and materials not being processed.



Motion

Unnecessary movements by people (e.g., walking).



Waiting

Wasted time waiting for the next step in a process.



Transportation

Unnecessary movements of products & materials.



Defects

Efforts caused by rework, scrap, and incorrect information.



Overproduction

Production that is more than needed or before it is needed.

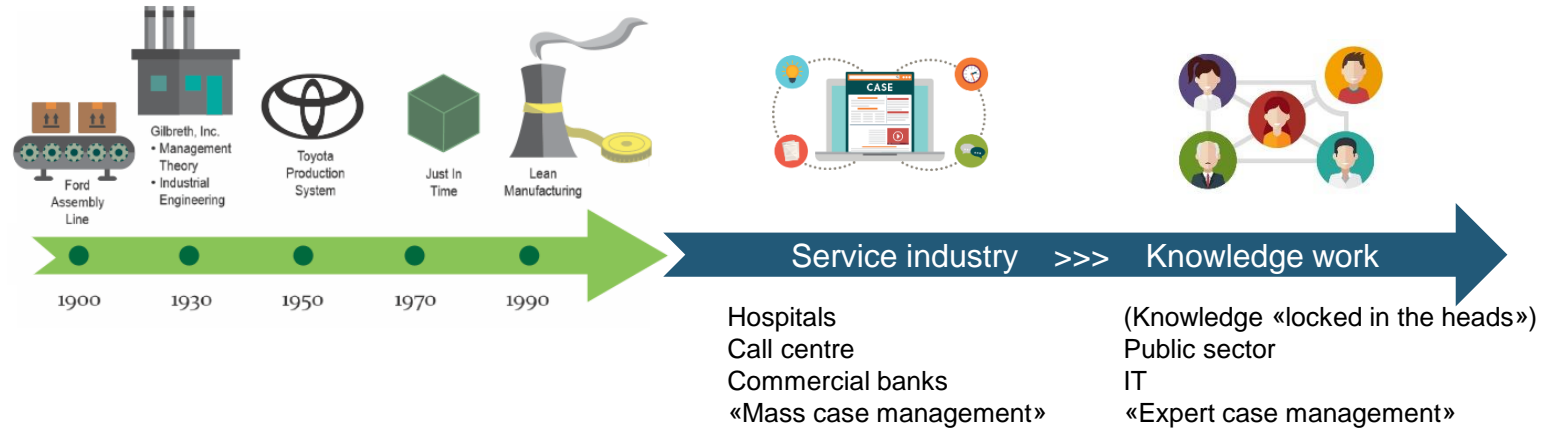


Overprocessing

More work or higher quality than is required by the customer.

Where does «Lean» come from, and why is it relevant to Norges Bank?

Lean-principles must be adapted to our organisation and culture



Lean branches:

- TPS
- Six Sigma (80s)
- Lean Management
- Lean Service/Banking/etc.
- Agile
- Lean start-up
- ...++under development

Examples of knowledge work waste

- Printing of documents
- Seek/ask for information
- Organise meetings
- Bad/ unnecessary meetings
- Interruptions / task-switching
- «that's how we've always done it» (internal rules/routines)
- We perform less unique tasks than we think
- We don't know the whole context of the process

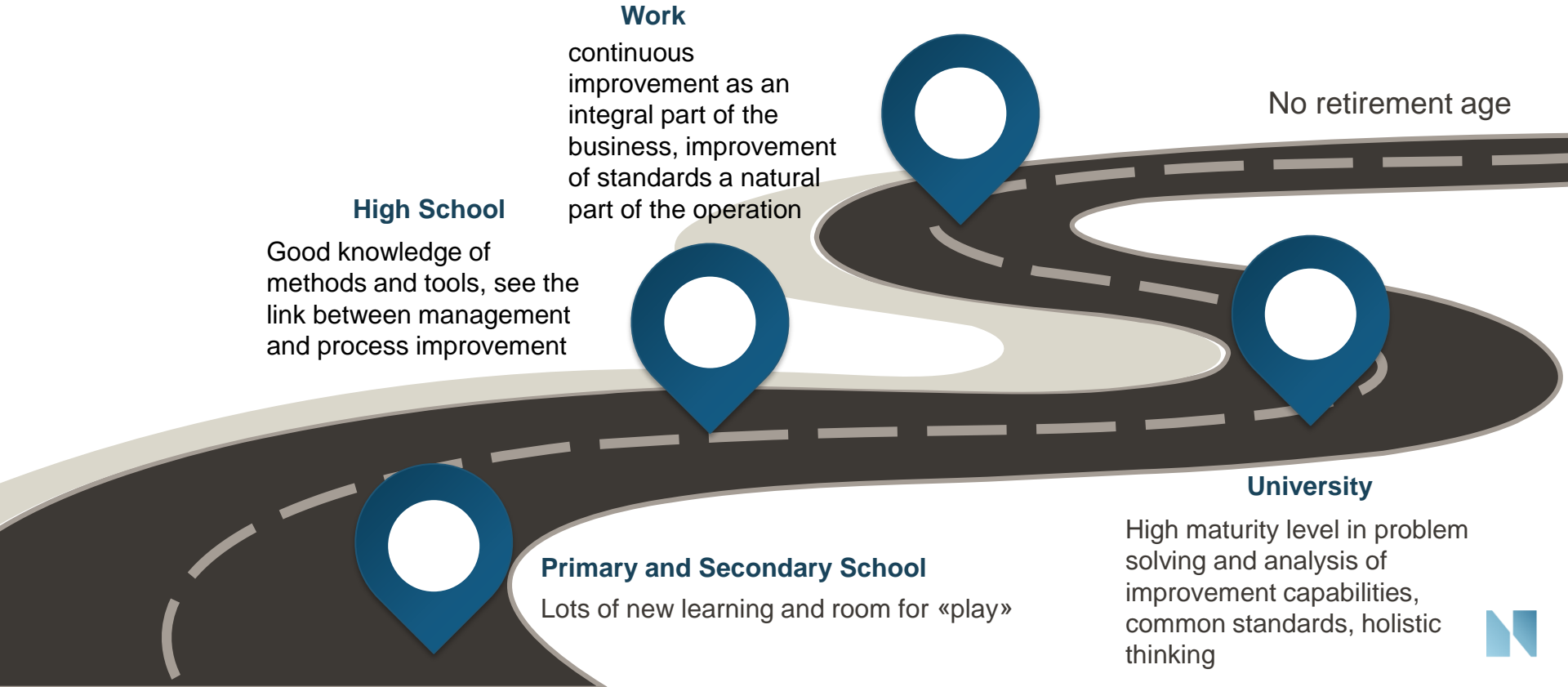
LEAN IN NORGES BANK

Why focus on LEAN in Norges Bank?

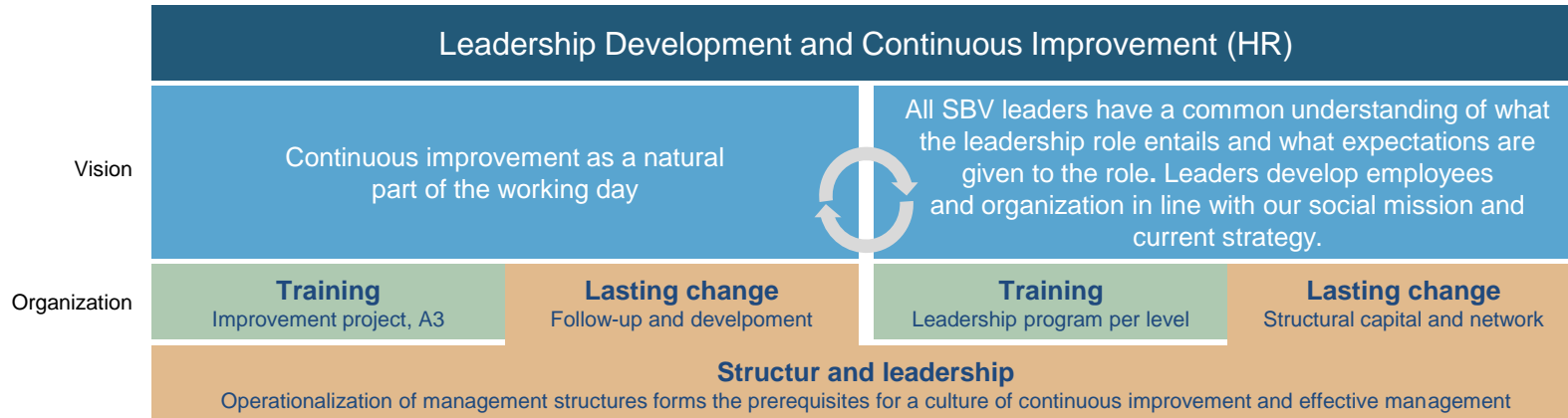
- Create more value for the customer and with regards to the services we provide
- Improve processes and optimize work flow
- Increase cross departmental collaboration
- Strengthen a culture and a mindset to continuously improve
- Meet future requirements of business productivity by working smarter (more for less)
- Secure optimal use of all employees' capacity and competence



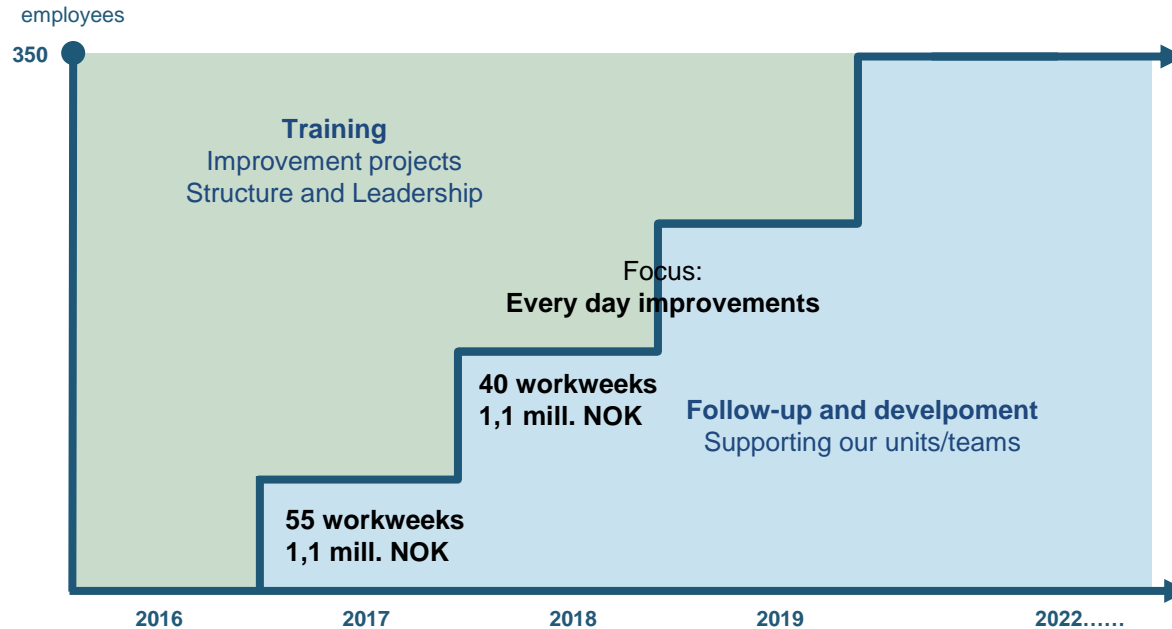
To work with a lean mindset is a journey for us



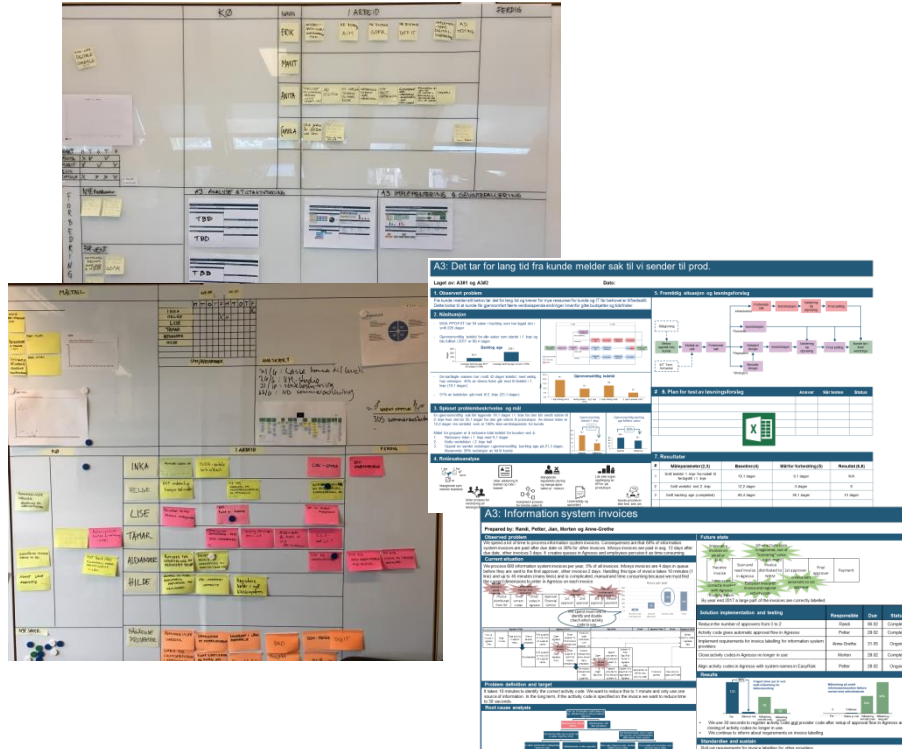
Organized with focus on follow-up and leaders role as the key success factor for lasting change



In the long term it is all the little improvements that makes the real difference



Continuous improvement in Norges Bank



Large improvement projects (training)

Every day improvements (lasting change)

Board and stand-up meetings are an arena to prioritize and activities, follow trends (KPI's), identify and discuss problems...



- Arena for the team to discuss:
 - Tasks/ongoing work
 - obstacles
 - Plan/capacity management
 - Improvement
- Short meetings, 2-5 times a week
- Length and frequency must be evaluated by the need of each unit/team
- Stand-up meetings with all team members
- Boards are used because it is visual and an easy way to communicate and share information

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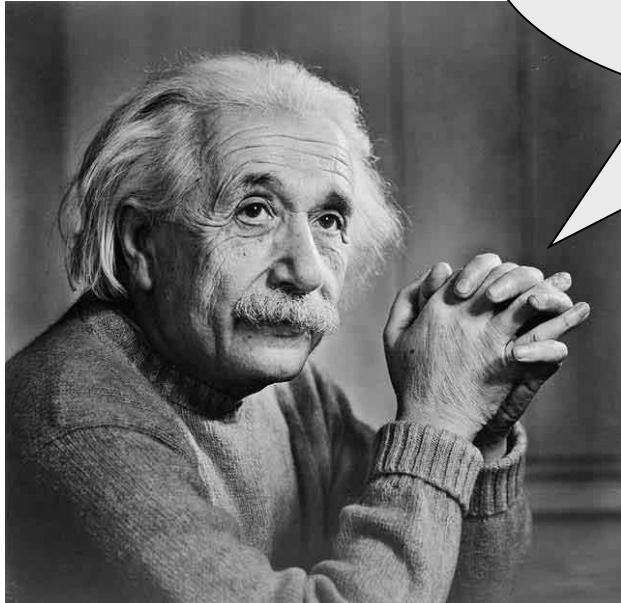
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STRUCTURED PROBLEM SOLVING

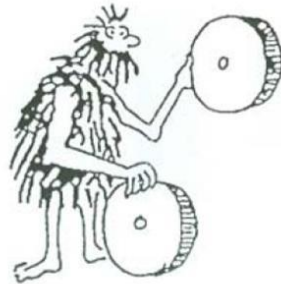
FROM «EXTRA WORK» TO SOMETHING WE DO EVERY DAY



Improvement requires a new way of seeing things



"You will not solve the problem with the same mindset that created them"



Why is problem solving difficult?

We do not understand the problem well enough

We do not find the correct solution

We do not implement the solution correct

We are trained to go directly to the solution



...and we tend to have a different opinion of what the problem really is



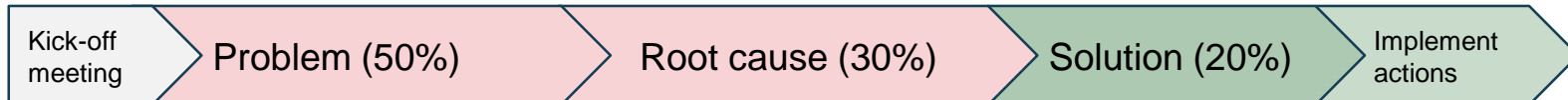
Problem solving principles

- ✓ Solve the problems immediately before they become complex and get many consequential errors
- ✓ Solve the problems as low in the organization as possible
- ✓ The problems should be solved by those who experience the problem
- ✓ Fix the problems permanently by removing the root causes
- ✓ Use a proven method to solve the problems



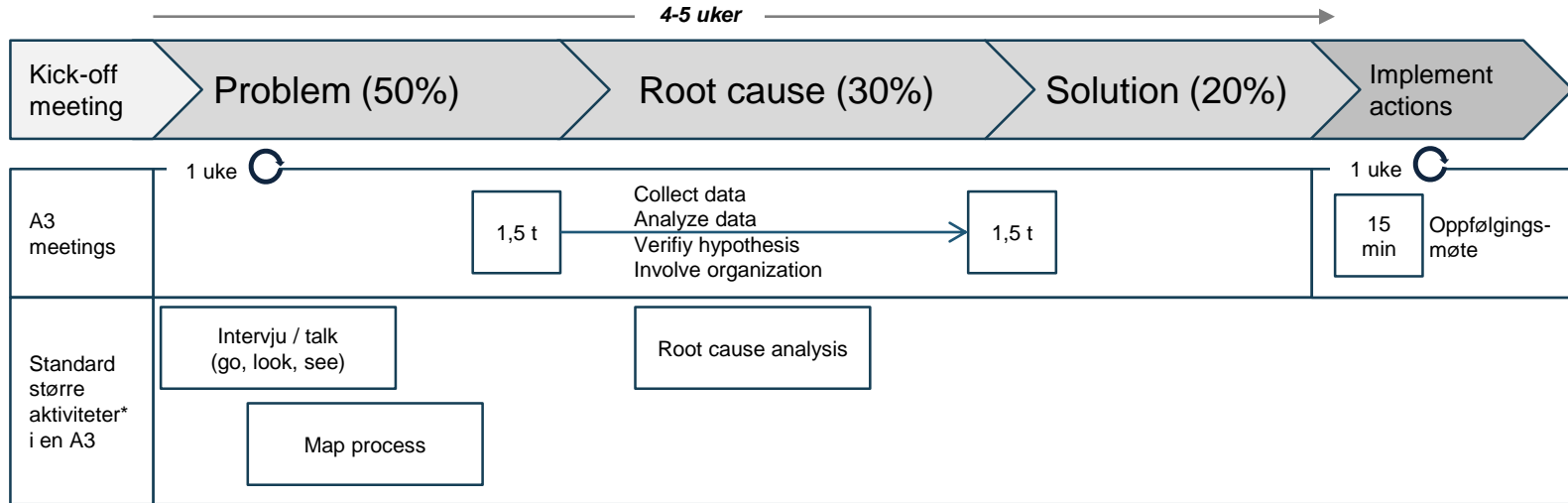
A3 thinking – common method for problem solving

Problem	Solution
A3:	
Laget av: _____ Dato: _____	
1. Observert problem	5. Fremtidig situasjon og løsningsforslag
2. Nåsituasjon	How do we want the future situation to be?
What does the problem look like?	
	6. Plan for test av løsningsforslag
	Ansvar Når testes Status
	What do we have to do to get there?
3. Spisset problembeskrivelse og mål	7. Måling av forbedring
	Måleparameter (2,3) Baseline (4) Mål for forbedring (5) Resultat (6,8)
4. Rotårsaksanalyse	
What is the root cause?	
	8. Implementere løsning og opprettholde resultat
	How do we know that our solution/actions worked?



Small or big A3's – you need fixed time to succeed

It's not the size that matters, it's how you use it




A3:Proessen for Foreldrepermisjon er tidkrevende

Laget av: Marit Aas Hoftvedt

Dato: Februar/Mars 2018

1. Observert problem

Proessen for Foreldrepermisjon er tidkrevende – for mange steg i prosessen.

2. Nåsituasjon

Økende antall:

2016: 20

2017: 23

2018 ytd: 24

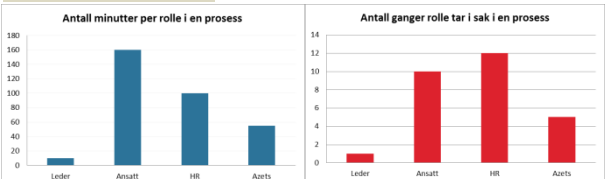
Tid brukt 2017:

Tid per sak: 5 t 25 min

2017 totalt: 125 t



28 steg
i prosessen

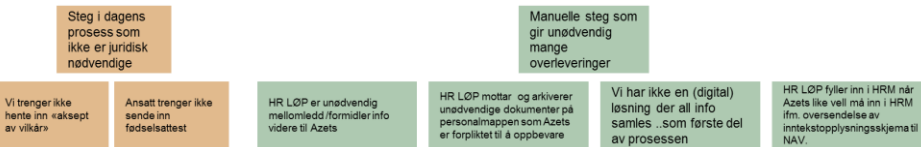


3. Spisset problembeskrivelse og måleparamenter

HR LØP «tar» i saken 12 ganger, det er unødvendige overleveringer og arkivering, og manuelle steg i prosessen.

(Rådgivning til ansatte er ikke en del av denne A3'en)

4. Rotårsaksanalyse



5. Fremtidig situasjon og løsningsforslag

Fase 1: Ny prosess med dagens verktøy



Fase 2: Med nytt verktøy



HR LØP tidsbruk:
Fase 1: -75%
Fase 2: -90%

1. Færre stopp i arbeidsflyten
2. Færre manuelle håndtering
3. En flyt for hele prosessen for den ansatte.
4. Enkel arkivering
5. Azets tar totalansvar for foreldrepengene

Redusert tidsbruk for alle involverte roller i prosessen



6. Implementeringsplan (test, juster, implementer)

	Ansvar	Status
Fjerne «aksept av vilkår»	Marit	Ferdig
Fjerne innsending av fødselsattest	Marit	Ferdig
Azets tar totalansvar for foreldrepengene – avtale endring med Azets (HR LØP tar kun ansvar for permisjonen fra NB)	Marit	Ferdig
Utvikle verktøy i serviceportalen for søknadsprosessen	Marit/Erik	Ferdig

7. Resultater

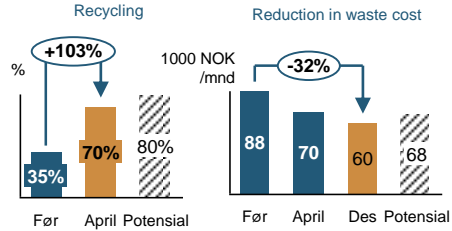
#	Måleparameter (2,3)	Baseline (4)	Mål for forbedring (5)	Resultat (6,7)
1	Tid per prosess	325 min	(215 min) 155 min	
2	Antall touch HR LØP per prosess	12	(2) 1	

Antatt gevinst 2019 (basert på 2018): 68 timer

Two examples

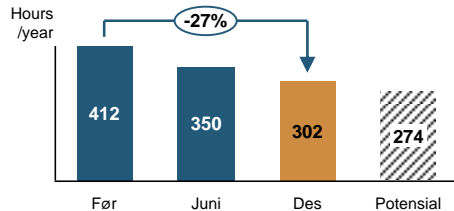
«Improvement project»

Identified potential for environmental benefits and reduced waste costs



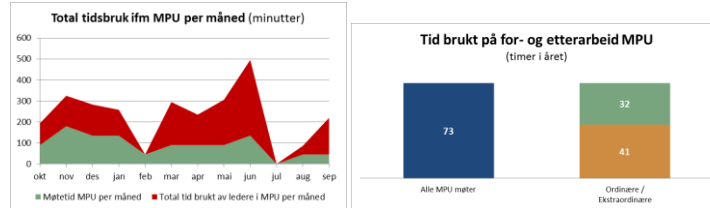
(-32%) 334 000 NOK yearly

Identified potential for free time (total time) spent on onboarding new employees



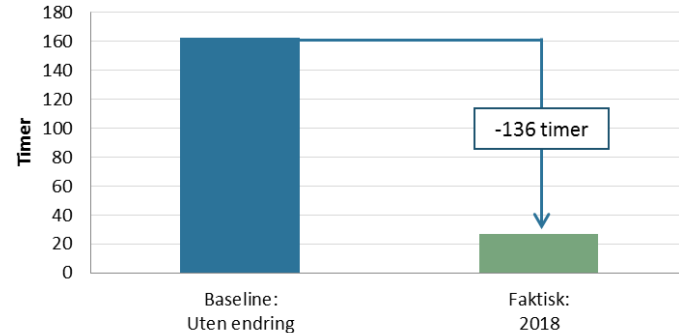
3 work weeks

«Every day improvement»



Realized gain

In total, we have spent 135 hours less in 2018 than if we had not made improvements



FINAL THOUGHTS

How do we measure success?

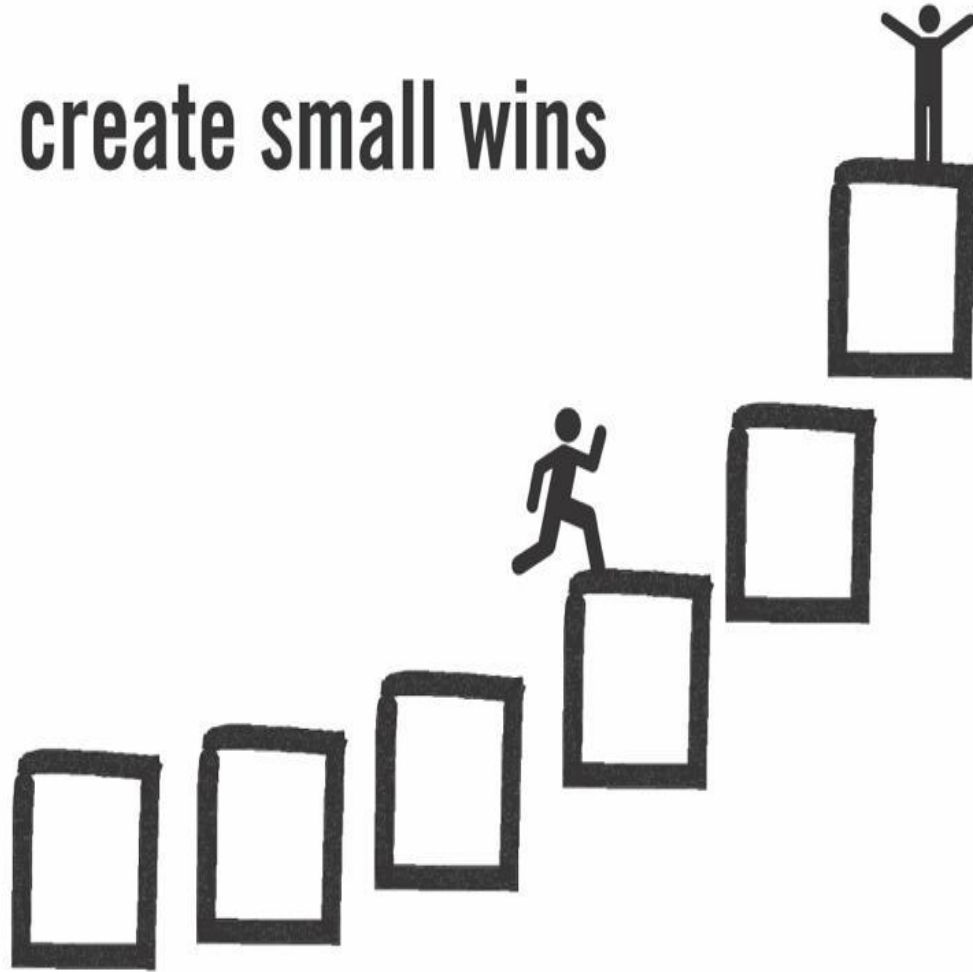
- We see, hear and experience that we work differently than before
- We can document that the improvement projects have concrete measurable results
- Long term: We have created a culture for continuous improvement



Don't



create small wins



The foundations of lean success

- Strategic anchoring
- Standardized method
- Engage the leaders*
- Make room for improvements
- Train the employees – learning by doing
- Coach and challenge
- You get what you measure
- Communicate success stories



**THANK YOU FOR YOUR
ATTENTION!**