

THE MENTAL LEAPS AT ERICSSON 3G



@hakanforss
@erik_schon
#Agile2014

THE MENTAL LEAPS AT ERICSSON 3G

METHODS &
TOOLS

RESOURCE
EFFICIENCY

SCATTERED
EXPERIENCES



PRINCIPLES &
MINDSET

FLOW
EFFICIENCY

CONTINUOUS
INNOVATION

WE WELCOME & VALUE YOUR FEEDBACK!



Face-to-face



Online

Twitter: [@hakanforss](#) [@erik_schon](#) [#Agile2014](#)

Agile 2014 Mobile App

Session QR Code

Session URL

FLOW SENSEI / PLUMBER



HÅKAN FORSS
LEAN/AGILE COACH

@hakanforss
@avegagroup

PROUD MEMBER OF THE FLOWFANS

ERIK SCHÖN

@erik_schon

Co-creator of conditions
where people, teams
and organizations
grow @ericsson



ERICSSON 3G: FACTS & FIGURES



>40% OF ALL 3G TRAFFIC
IN ERICSSON NETWORKS

1 800 PEOPLE



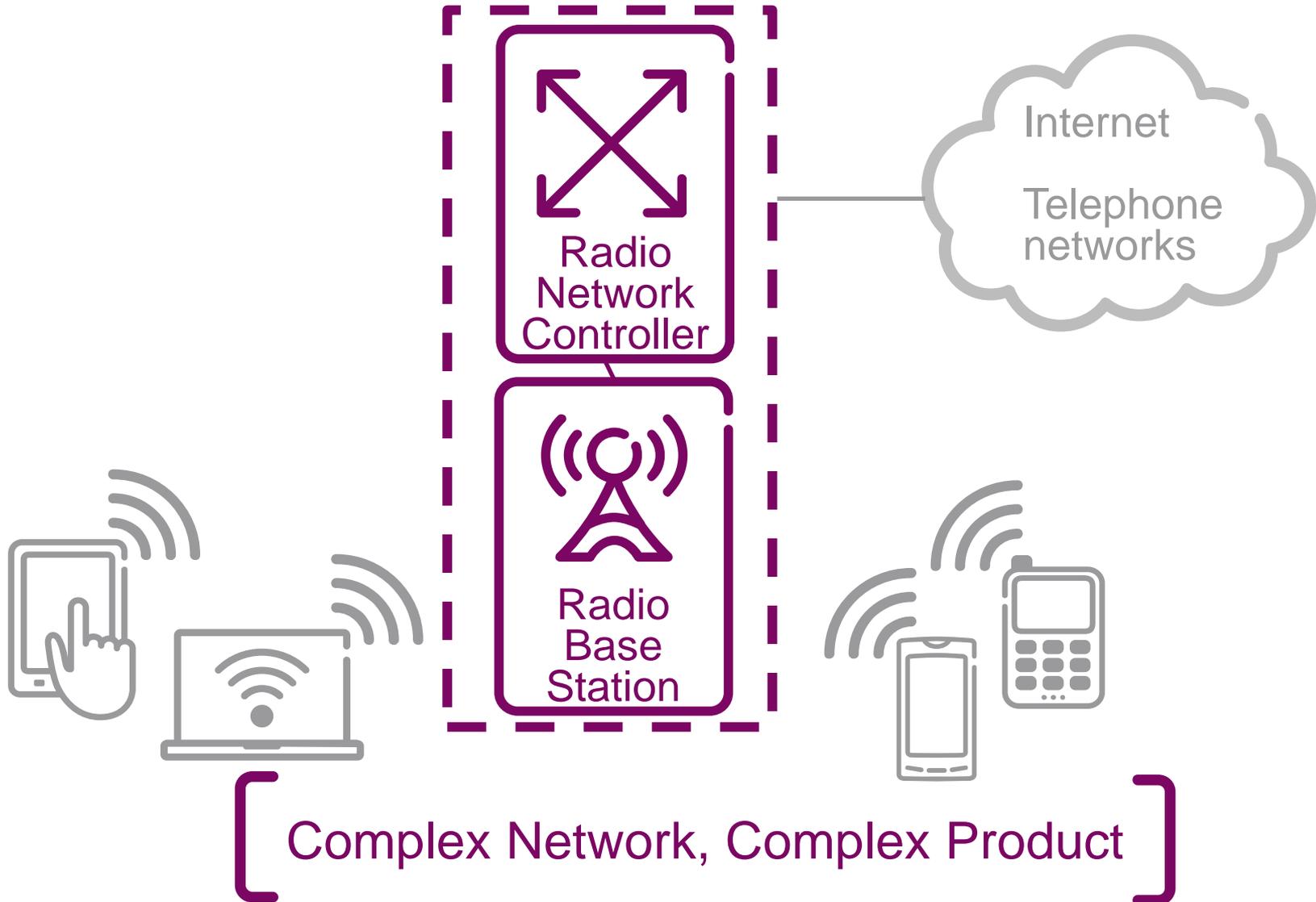
~100 TEAMS

10 R&D SITES

#1 MOBILE 3G
NETWORKS

Our Vision: A Networked Society where every person and every industry is empowered to reach their full potential

3G NETWORK OVERVIEW





WHY CHANGE?

2005



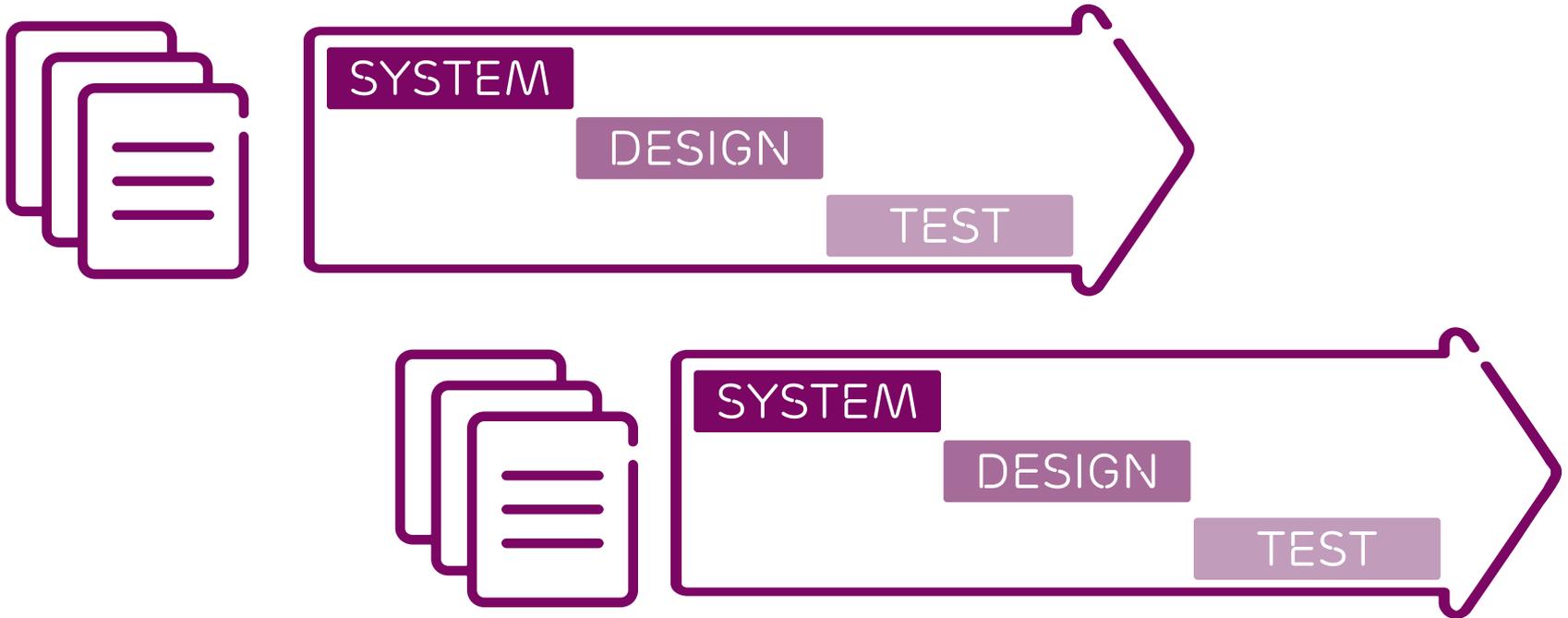
2013



HOW COME
YOU MIGHT NEED
TO CHANGE YOUR
WAYS OF WORKING?

2 minutes discussion in pairs

OUR HERITAGE: IMPROVING THE WATERFALL FOR 30+ YEARS ...



2-3 year projects, 100 000-200 000 person hours

[2010: Improvement potential questionable ...
We must try something fundamentally different]

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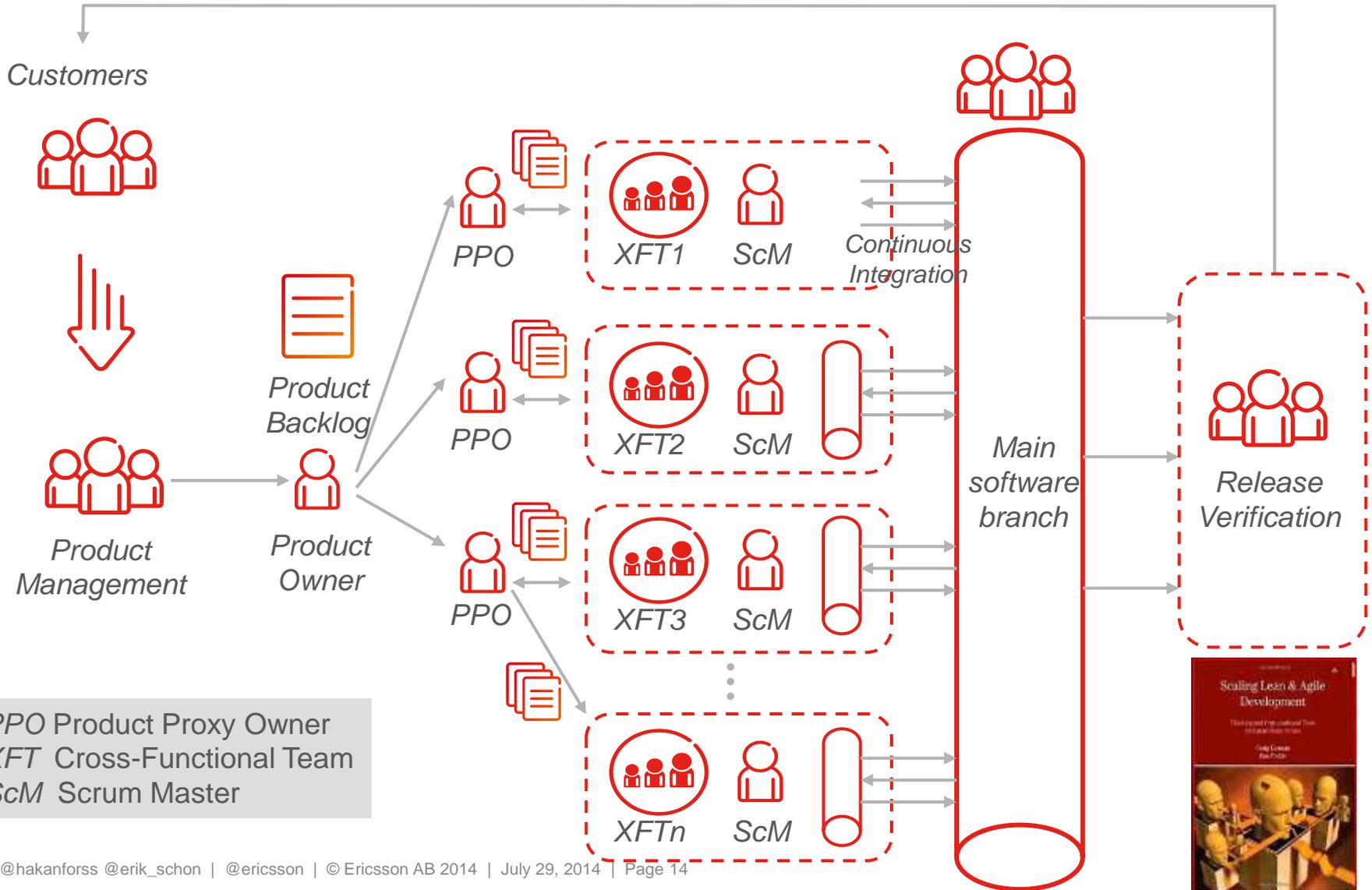


PRINCIPLES &
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INSPIRATION: OUR COLLEAGUES IN FINLAND ...



PPO Product Proxy Owner
 XFT Cross-Functional Team
 ScM Scrum Master

FROM METHODS & TOOLS TO PRINCIPLES & MINDSET



Initial focus on
needs and direction
Inspiration from
Thought Leaders
Culture of thinking
for ourselves



PRINCIPLES & MINDSET: POINT TO THE DESTINATION



TRY: CLEAR NEEDS



INCREASE EFFICIENCY
TO ENABLE MORE OUTPUT



REDUCE LEAD-TIME
TO BE MORE RESPONSIVE



BUILD QUALITY INTO
OUR WAY OF WORKING



EMPOWER PEOPLE

PRINCIPLES & MINDSET: FROM LARGE BATCHES ...



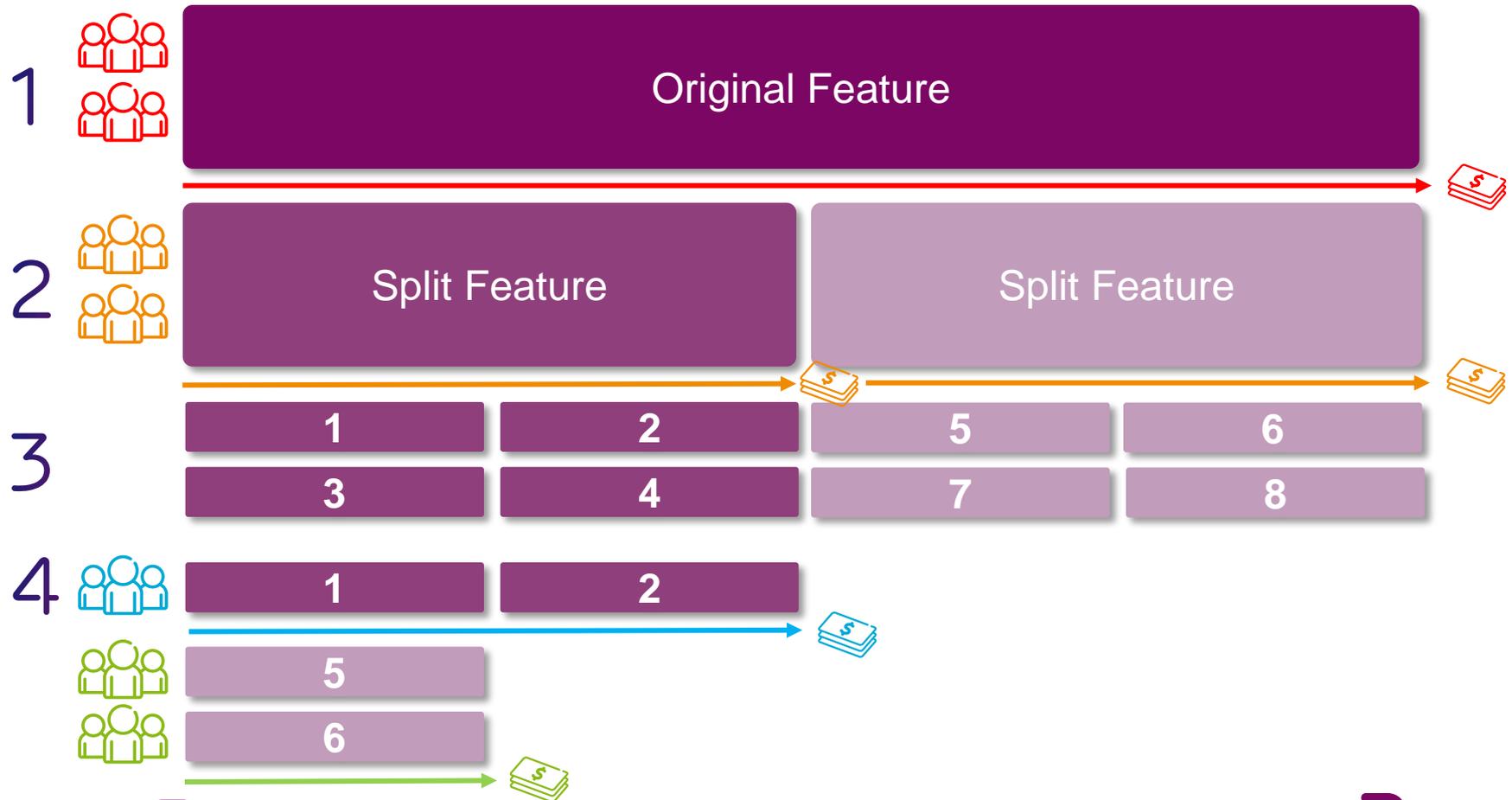
PRINCIPLES & MINDSET: ... TO SMALL BATCHES



TRY: IMPROVEMENTS AS SMALL EXPERIMENTS



TRY: ELEPHANT CARPACCIO



Smaller slices → faster value delivered
Early feedback → direction change if needed

PRINCIPLES & MINDSET: FROM LOCAL "KANBAN" ...



PRINCIPLES & MINDSET: ... TO GLOBAL AWARENESS





HOW MIGHT YOU
SEE THE FLOW IN
YOUR WAYS OF
WORKING?

2 minutes discussion in pairs

TRY: END-TO-END VISUALIZATION ROOM



room is usually free all day Mon & Fri, and sometimes Tue, Wed afternoons

VISUALIZATION ROOM

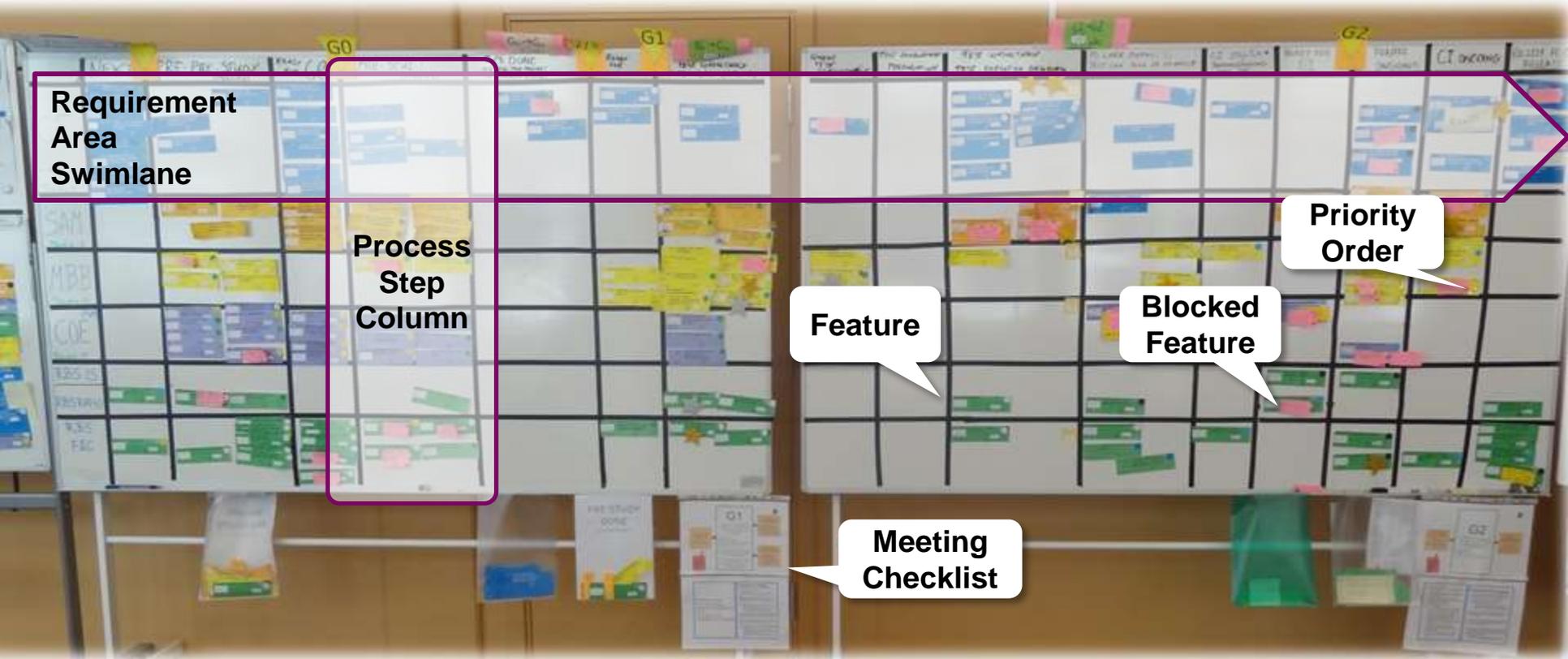
room is open for all to enter
anytime (except Thurs) even
when meetings are ongoing.

PLEASE USE BACK ENTRANCE
AND KEEP SILENT DURING MEETINGS

THIS WAY



TRY: END-TO-END VISUALIZATION ROOM



**Requirement
Area
Swimlane**

**Process
Step
Column**

Feature

**Blocked
Feature**

**Priority
Order**

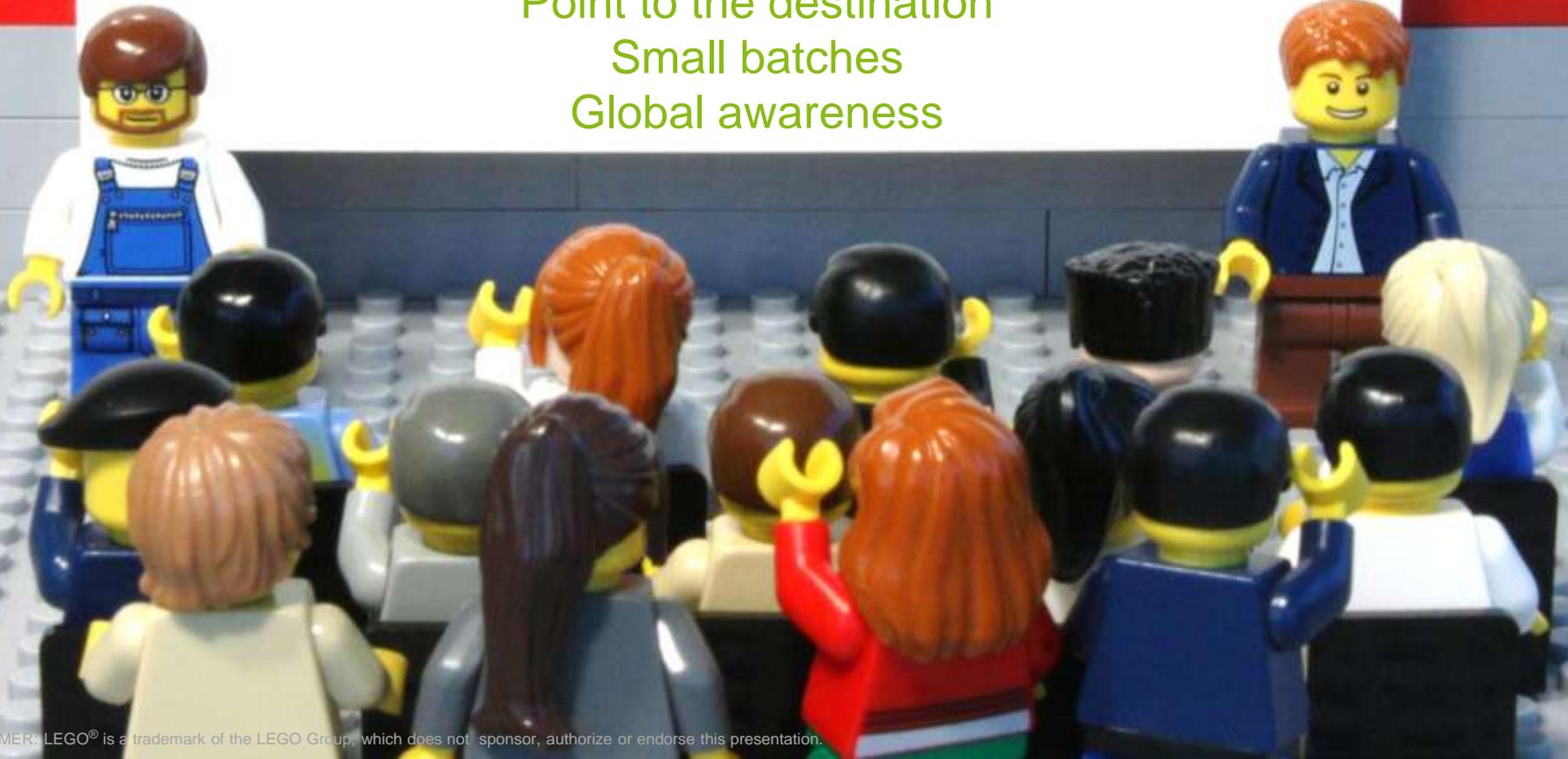
**Meeting
Checklist**

METHODS &
TOOLS

PRINCIPLES &
MINDSET

Q&A

Point to the destination
Small batches
Global awareness



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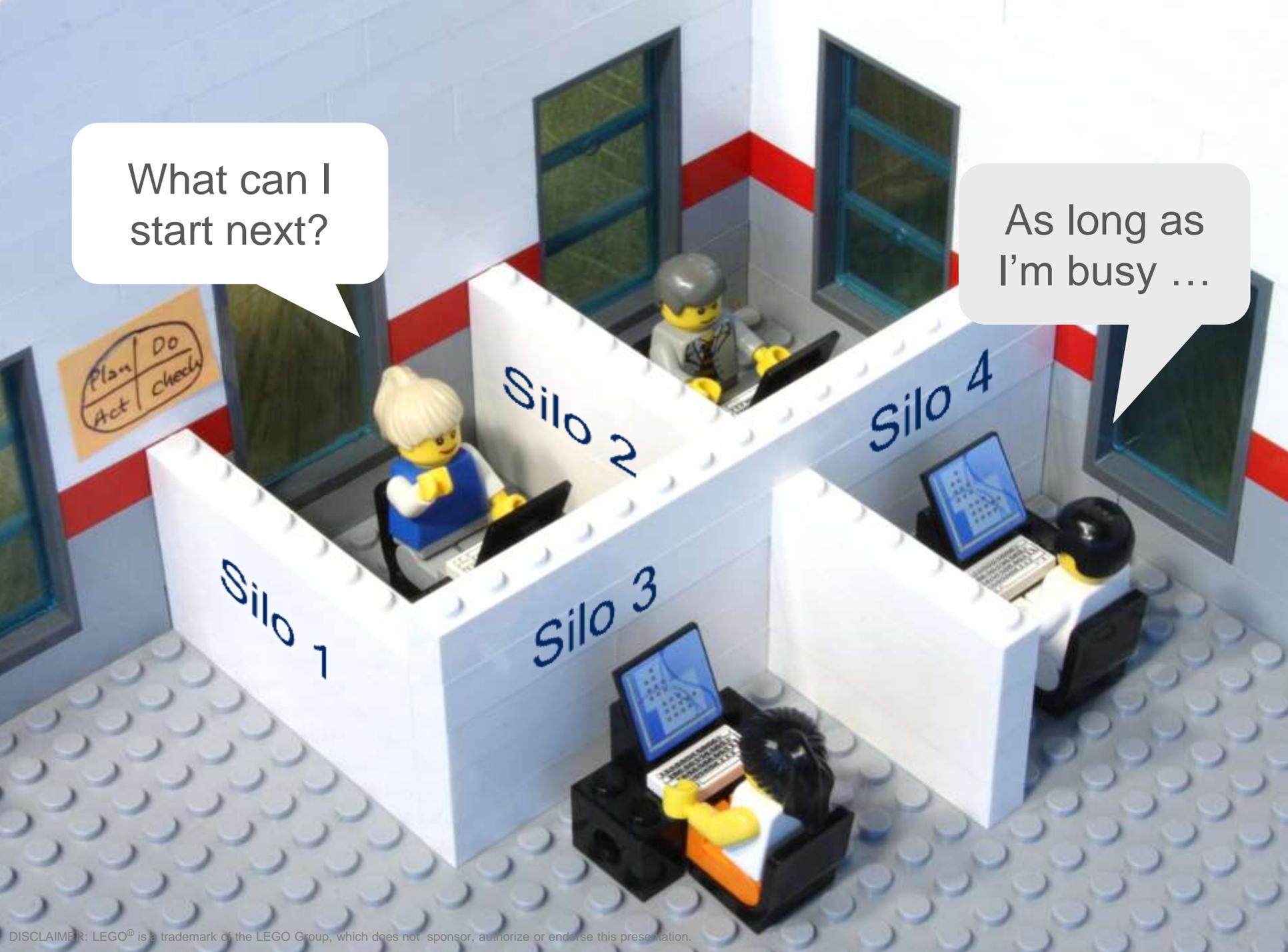
PRINCIPLES &
MINDSET

FLOW
EFFICIENCY

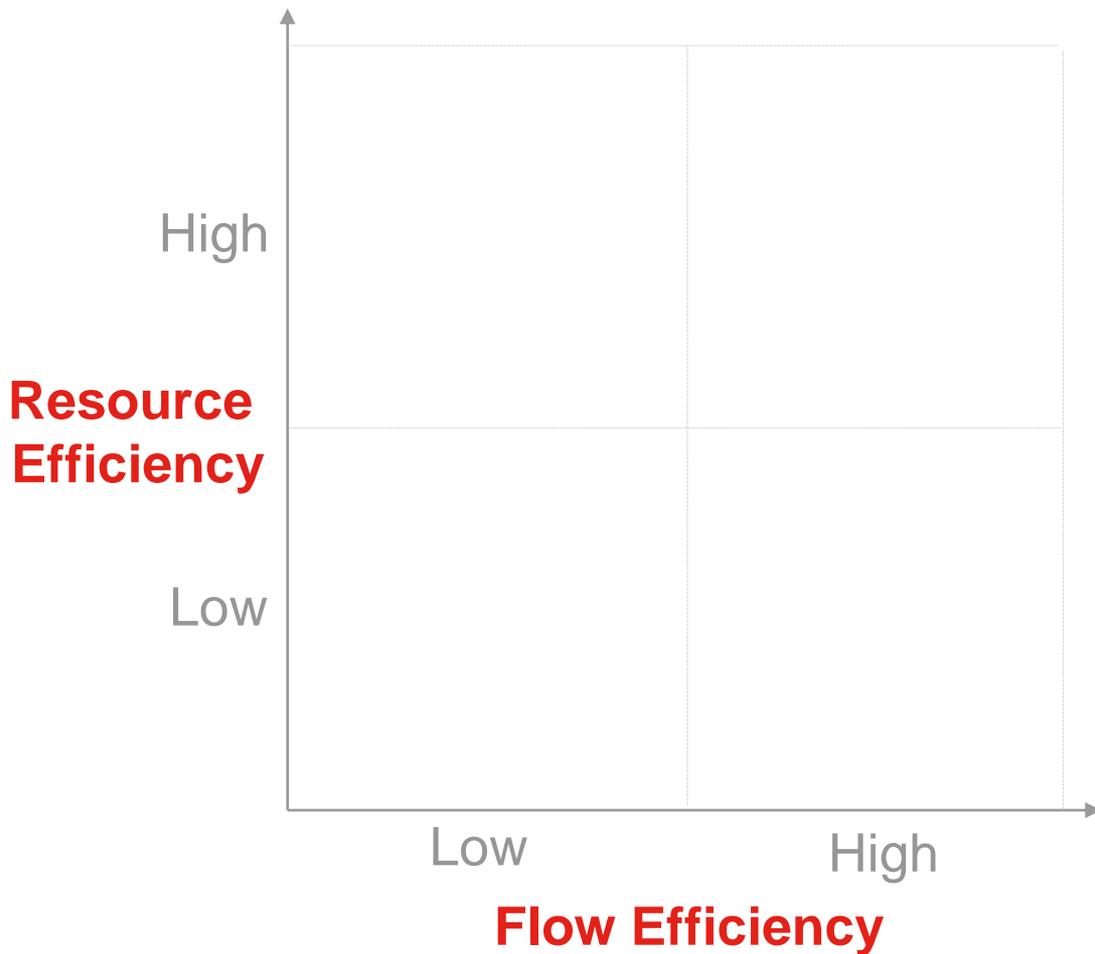
CONTINUOUS
INNOVATION

What can I start next?

As long as I'm busy ...



INSPIRATION: WHAT IS LEAN?

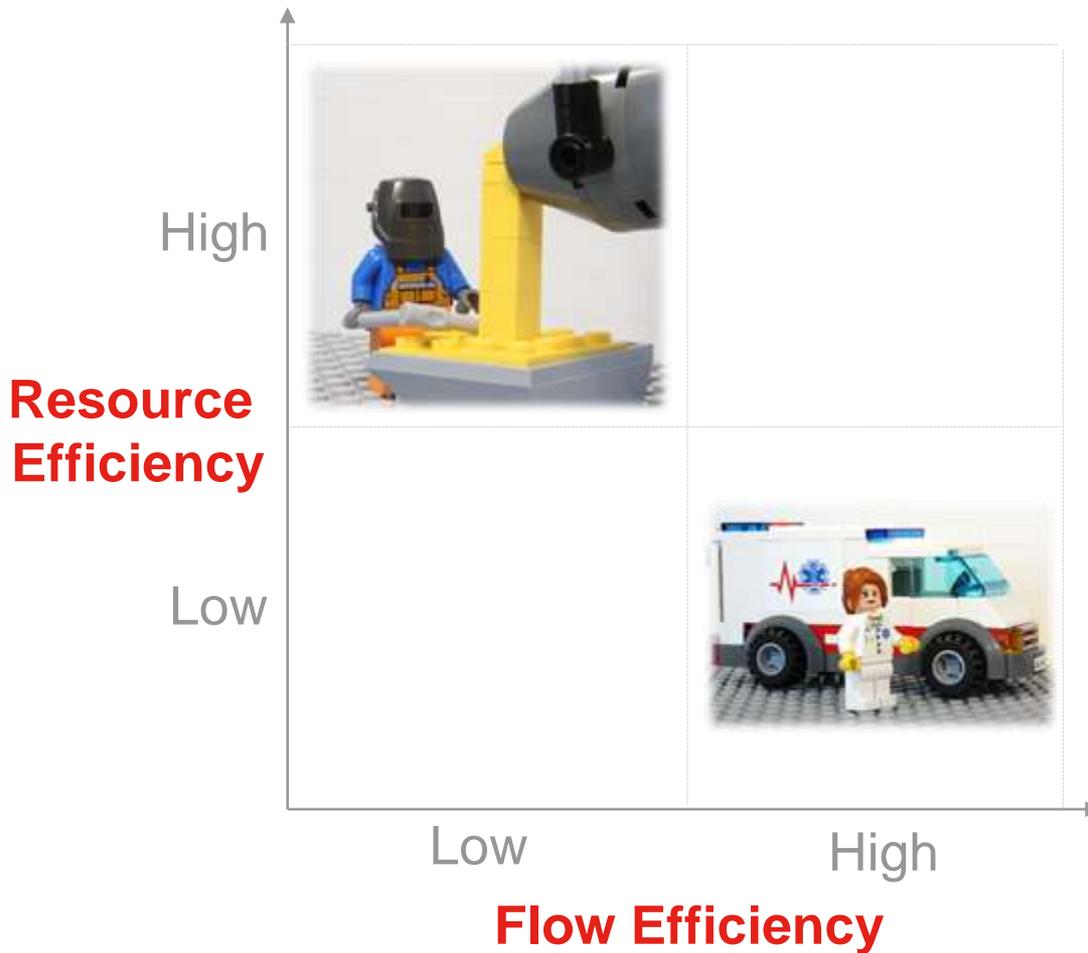


Prioritize flow efficiency
Prioritize continuous learning



Niklas Modig
Stockholm School of Economics
[@LeanOnMyself](#)

INSPIRATION: WHAT IS LEAN?

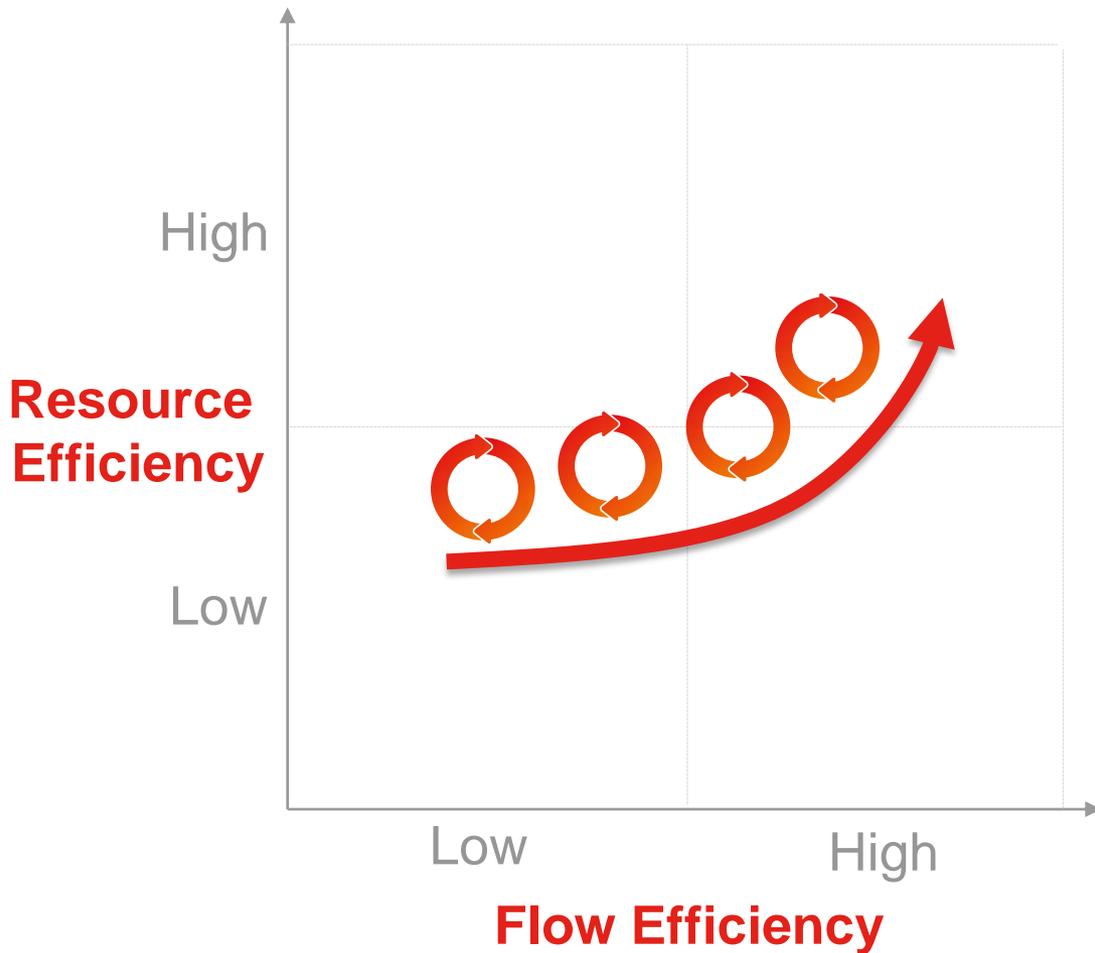


Prioritize flow efficiency
Prioritize continuous learning



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INSPIRATION: WHAT IS LEAN?



Prioritize flow efficiency
Prioritize continuous learning



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FLOW EFFICIENCY: VISUALIZE END-TO-END

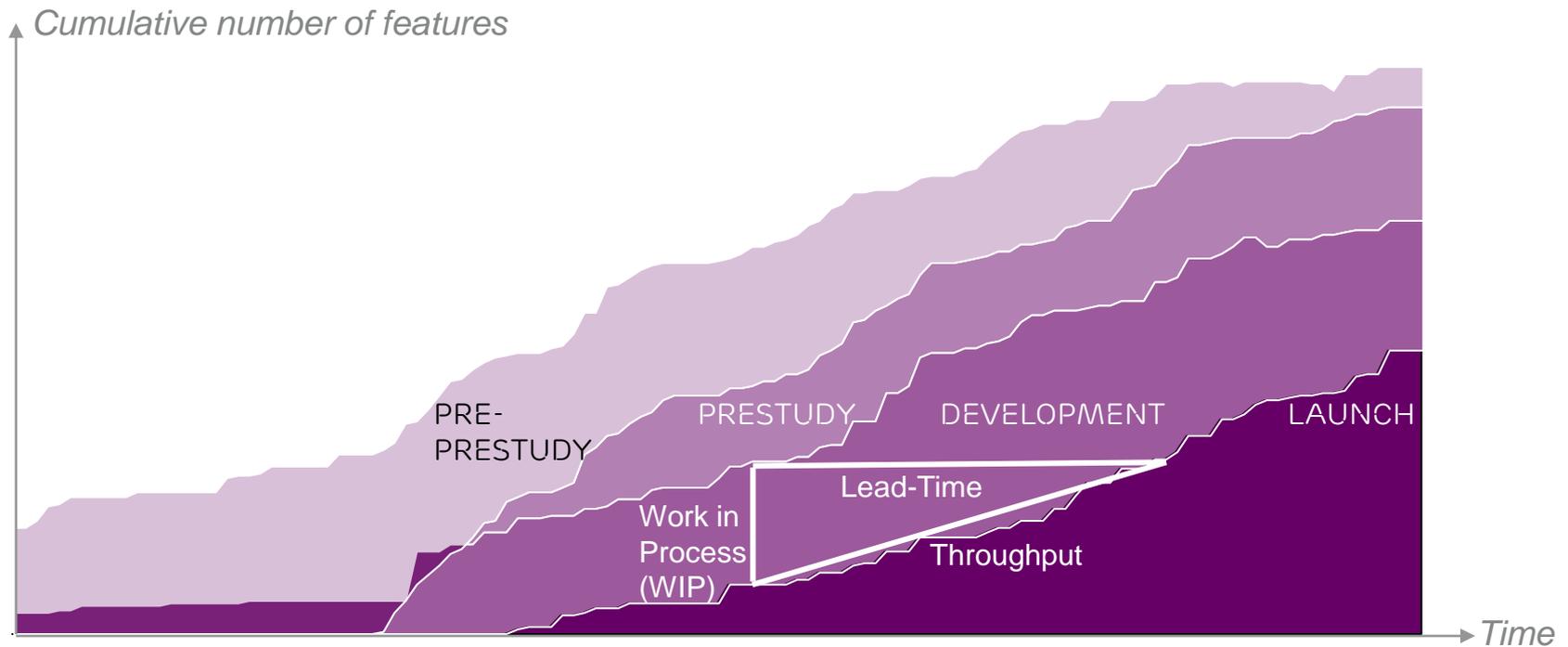


TRY: END-TO-END FLOW VISUALIZATION ROOM

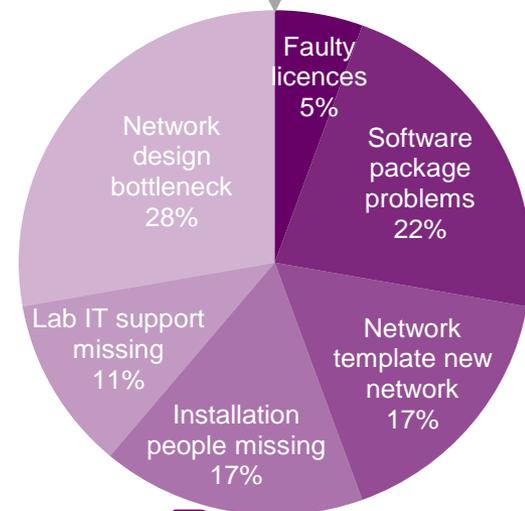
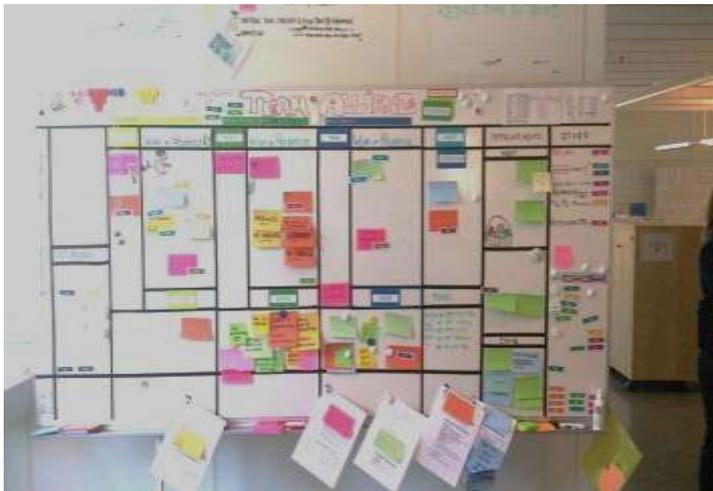
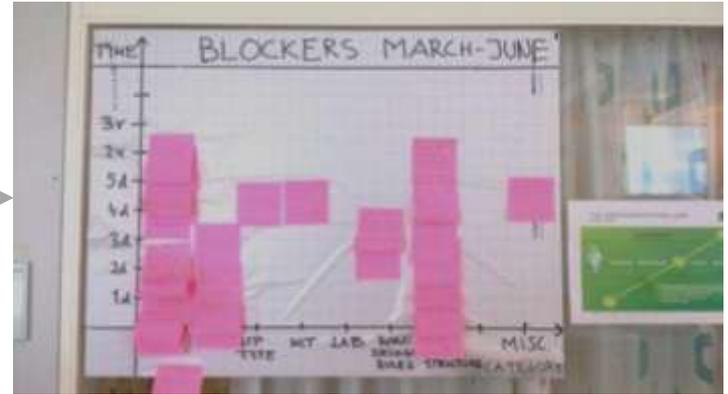
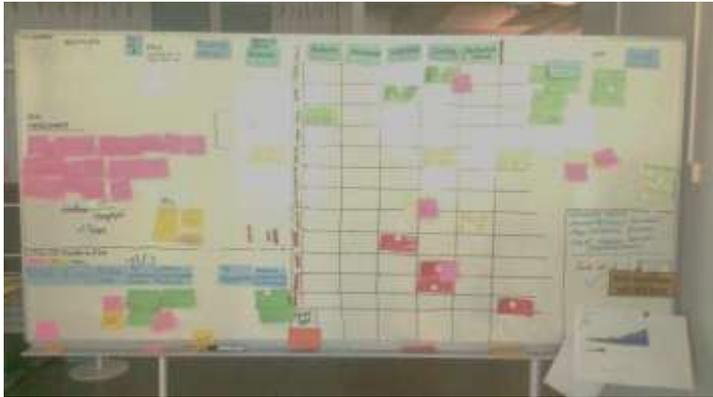


10 meetings per week, 10-15 people per meeting - using video conference
Area Product Owner, Operative Product Owners, Line Managers, Program Managers

TRY: END-TO-END FLOW TREND VISUALIZATION



TRY: LOVE YOUR BLOCKERS



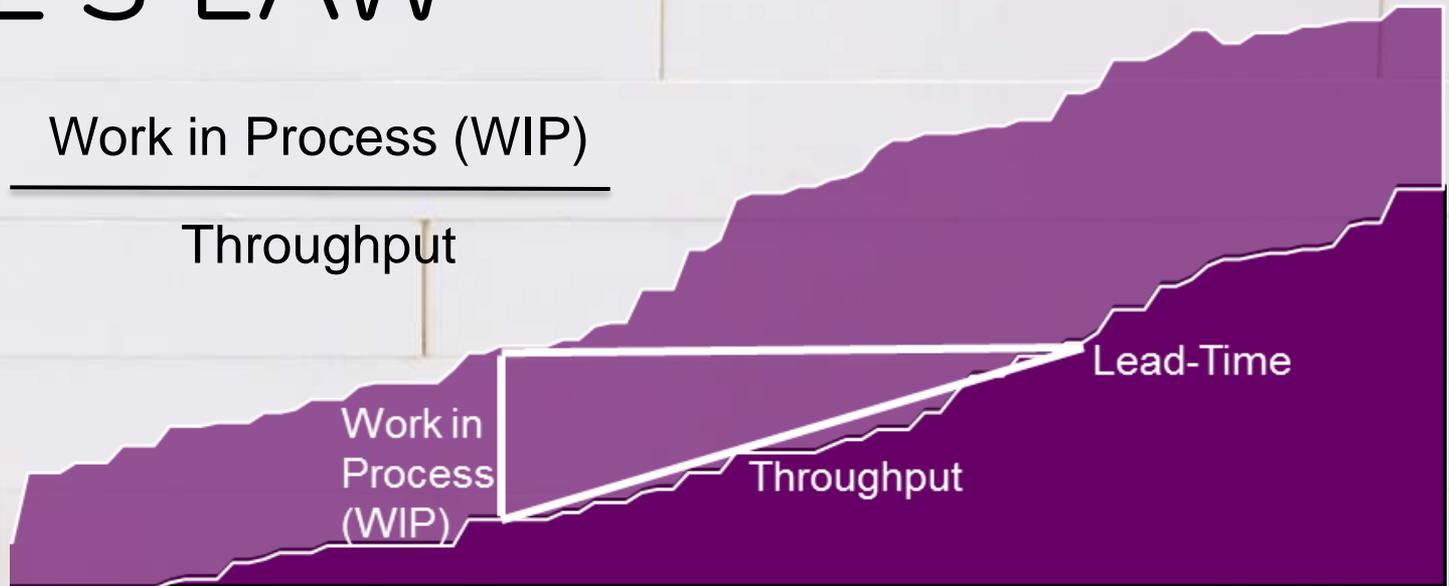
Take action based on patterns

FLOW EFFICIENCY: IN PRODUCT & PROCESS

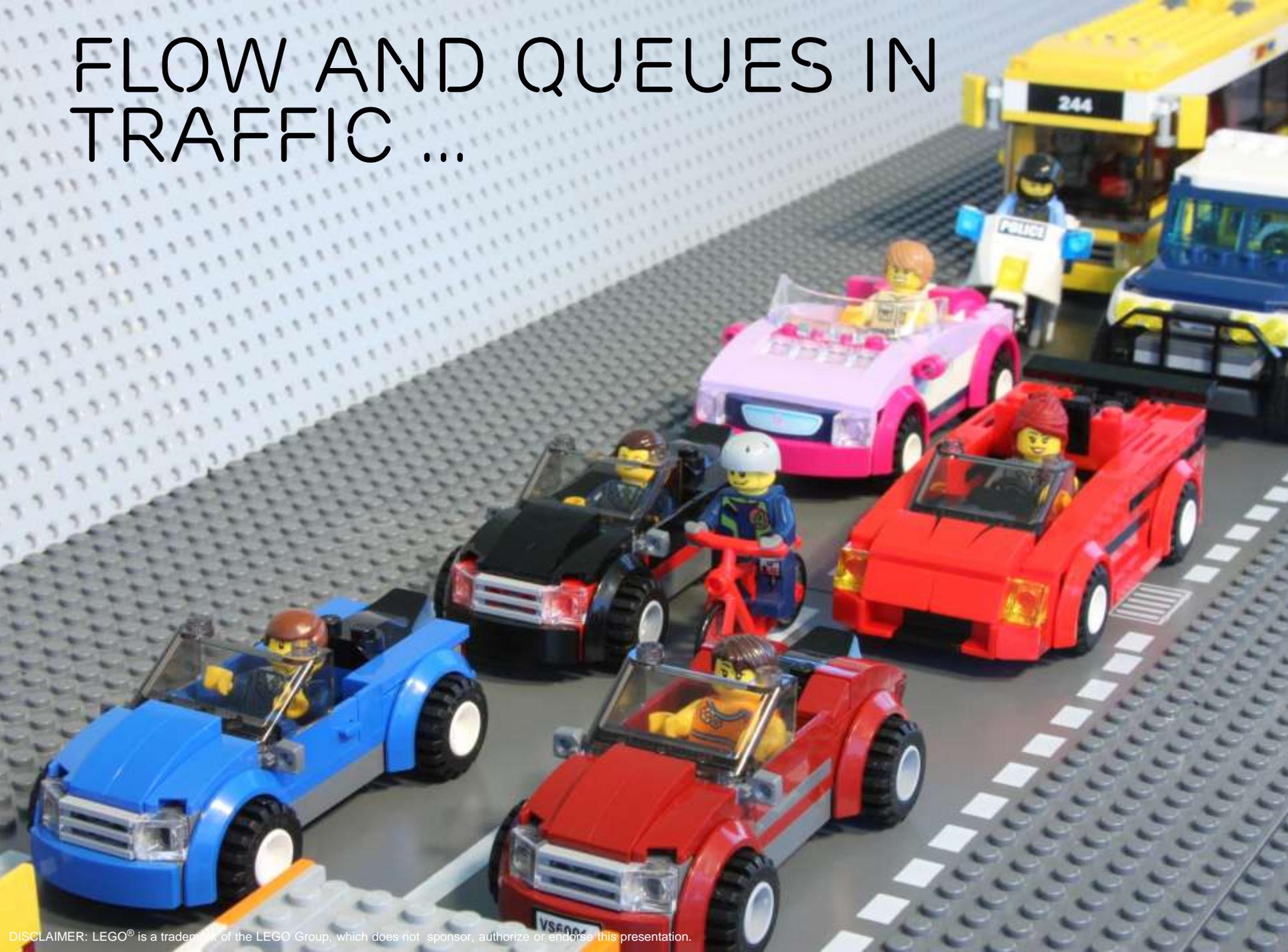


FLOW EFFICIENCY: LITTLE'S LAW

$$\text{Lead Time} = \frac{\text{Work in Process (WIP)}}{\text{Throughput}}$$



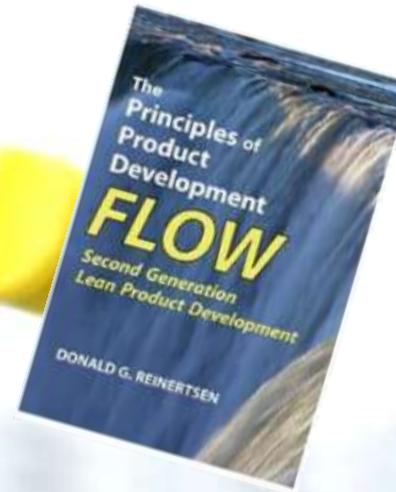
FLOW AND QUEUES IN TRAFFIC ...



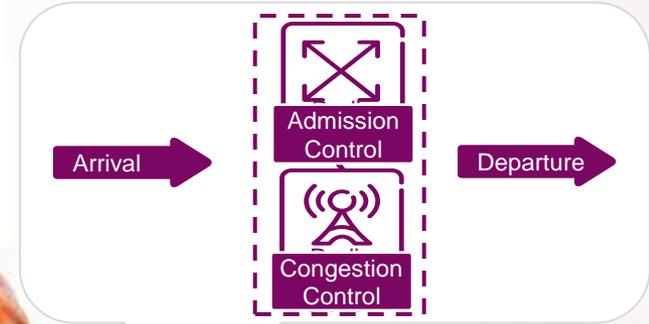
INSPIRATION:

“Ericsson: you already know this,
you use it in your products
every day!”

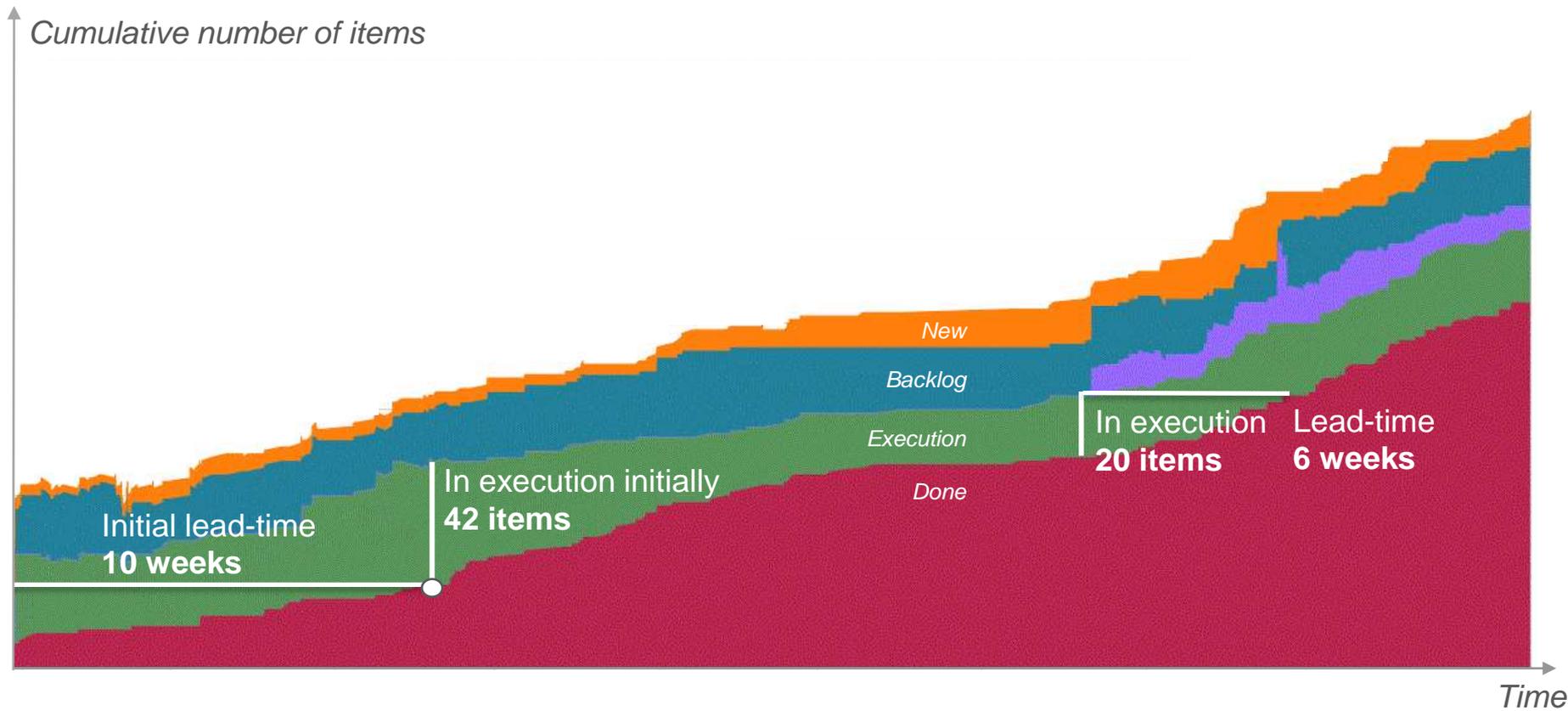
Don Reinertsen
@DReinertsen



TRY: STORY-TELLING AROUND FLOW IN PRODUCT & PROCESS



TRY: ACTIVE FLOW HANDLING



Experiment: Limiting number of parallel activities
Result: Reduced lead-time by 40%

RESOURCE
EFFICIENCY

FLOW
EFFICIENCY

Q&A

End-to-end visualization
Story-telling around flow
Active flow handling



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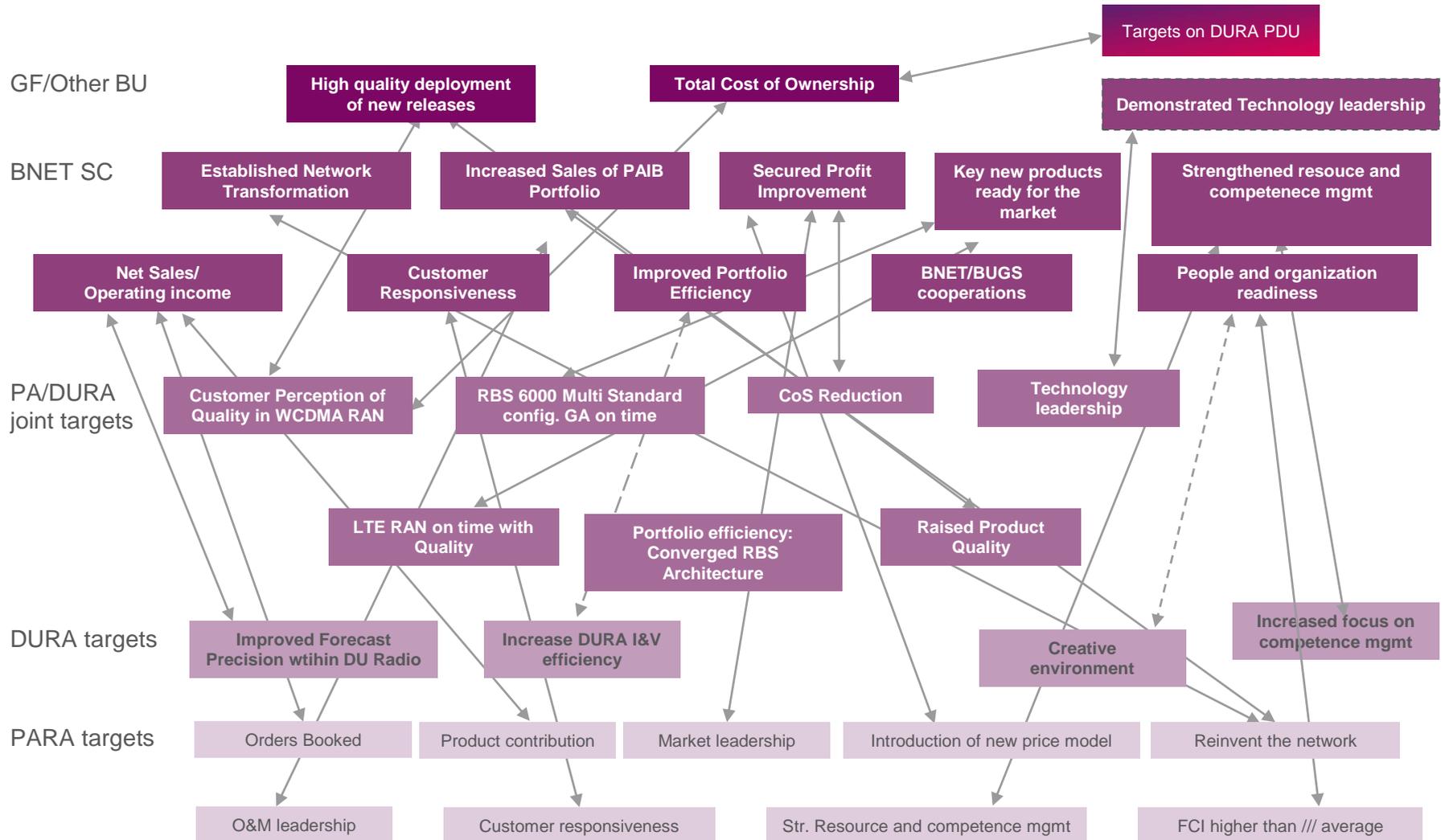


PRINCIPLES &
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AVOID: COMPLEX YEARLY SCORECARDS ...



TRY: ONE CRISP QUARTERLY CHALLENGE



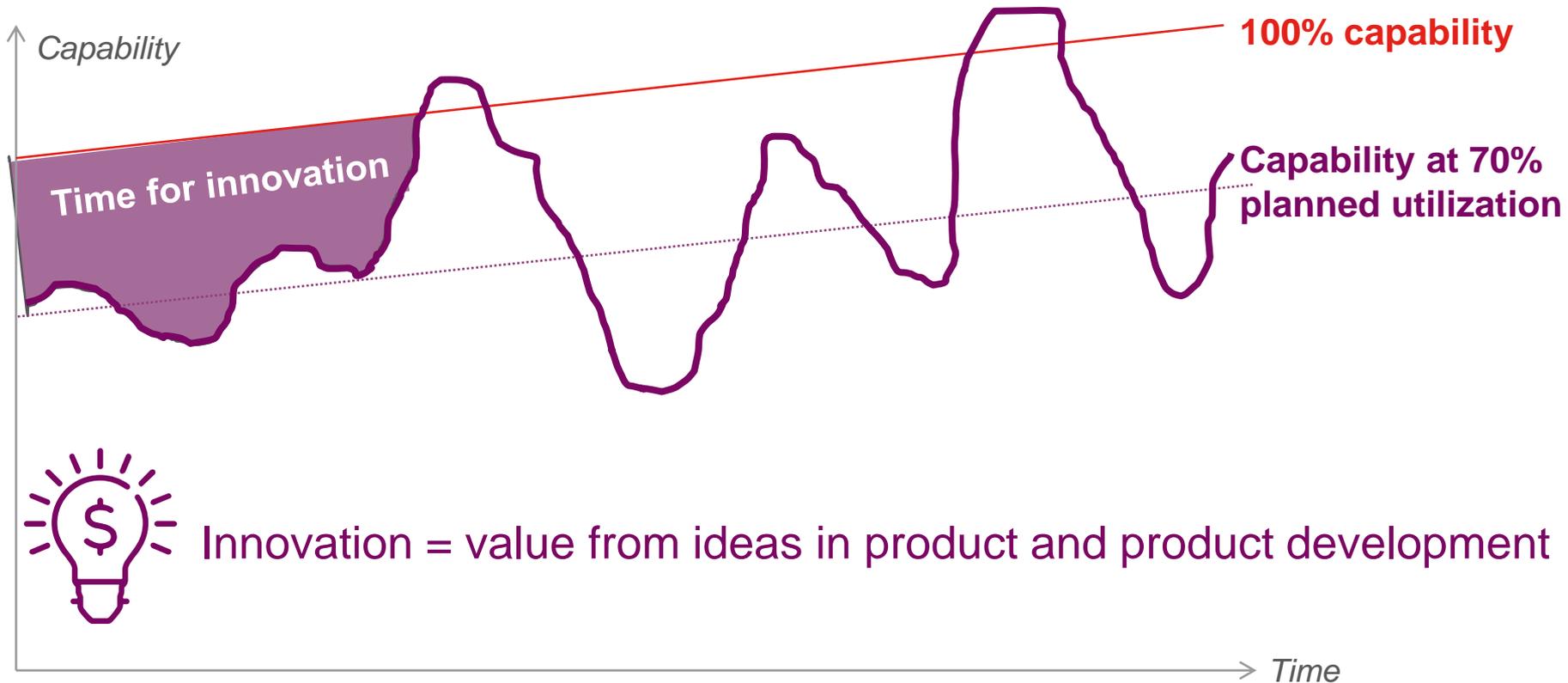
[Pointing towards long-term vision]



HOW MIGHT YOU
SECURE TIME FOR
INNOVATION?

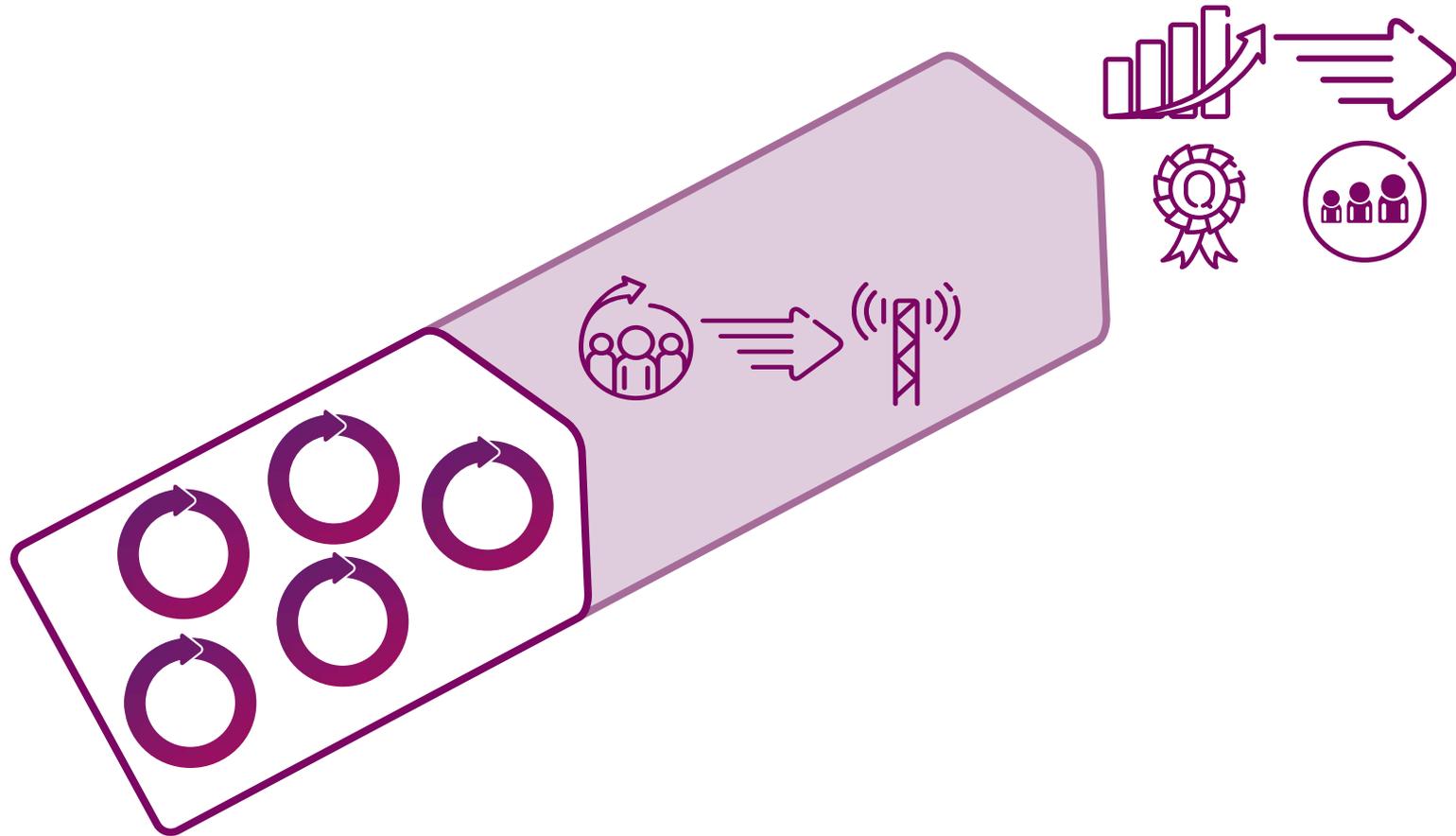
2 minutes discussion in pairs

TRY: PLAN FOR INNOVATION



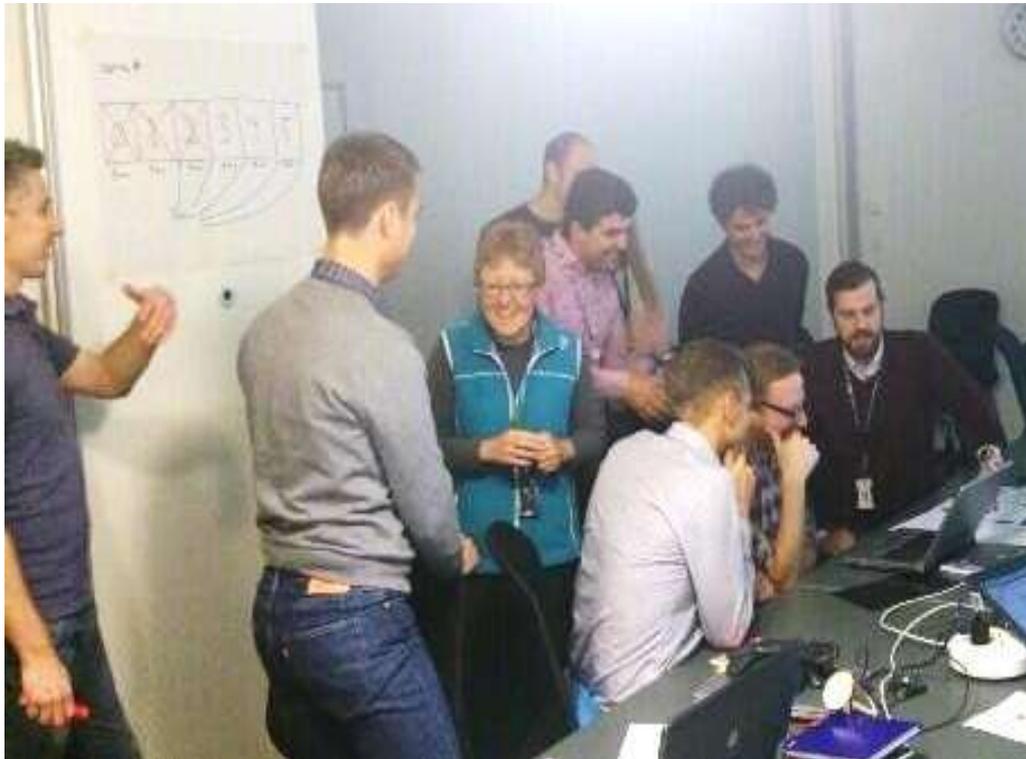
[Planning with less than full utilization
creates environment for innovation]

TRY: CONTINUOUS INNOVATION TOWARDS THE VISION



Small experiments
towards next challenge

TRY: LEARNING DAY



	Cafét K180 01	Neptunus K180 01	Saturnus K180 01	Juno K180 02
9.00	Customer Insight Holly Binns	WMR Git migration Roger Holmberg	Learn, share, inspire: Help us to build an eye-opener for personal development! Elinor Lange & Bodil Björnberg	Ueh block test dojo Charlie Westergren
10.00	Radio dot - system & concept study Magnus Lindroth & Ulf Hagstrom	Executive Trinity Stephen Bungay (video)	Management Innovation Panthers	
11.00				
12.00	LUNCH			
13.00	Product deployment & performance Peter Högberg	Happiness Lukasz Olczyk	Flow thinking - The mental leaps Erik Schön & Håkan Forss	Ueh block test dojo Charlie Westergren
14.00	Inner leadership Anna Agrell	Lean coffee K180 02 coffee corner		
15.00		Test automation with ATA Pär Öberg	3G-sim performance on Evo HW Mats Carlberg	

Full day, multi-site, multi-track, internal conference with own content - every sprint

INSPIRATION: THE #1 SPORTS CAR COMPANY



🔄🔄 The best Ferrari car
we have ever produced
is the next one.

🔄🔄 *Enzo Ferrari*

Founder & CEO, 1898-1988

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WHAT MIGHT BE
YOUR NEXT
MENTAL LEAP?

2 minutes discussion in pairs

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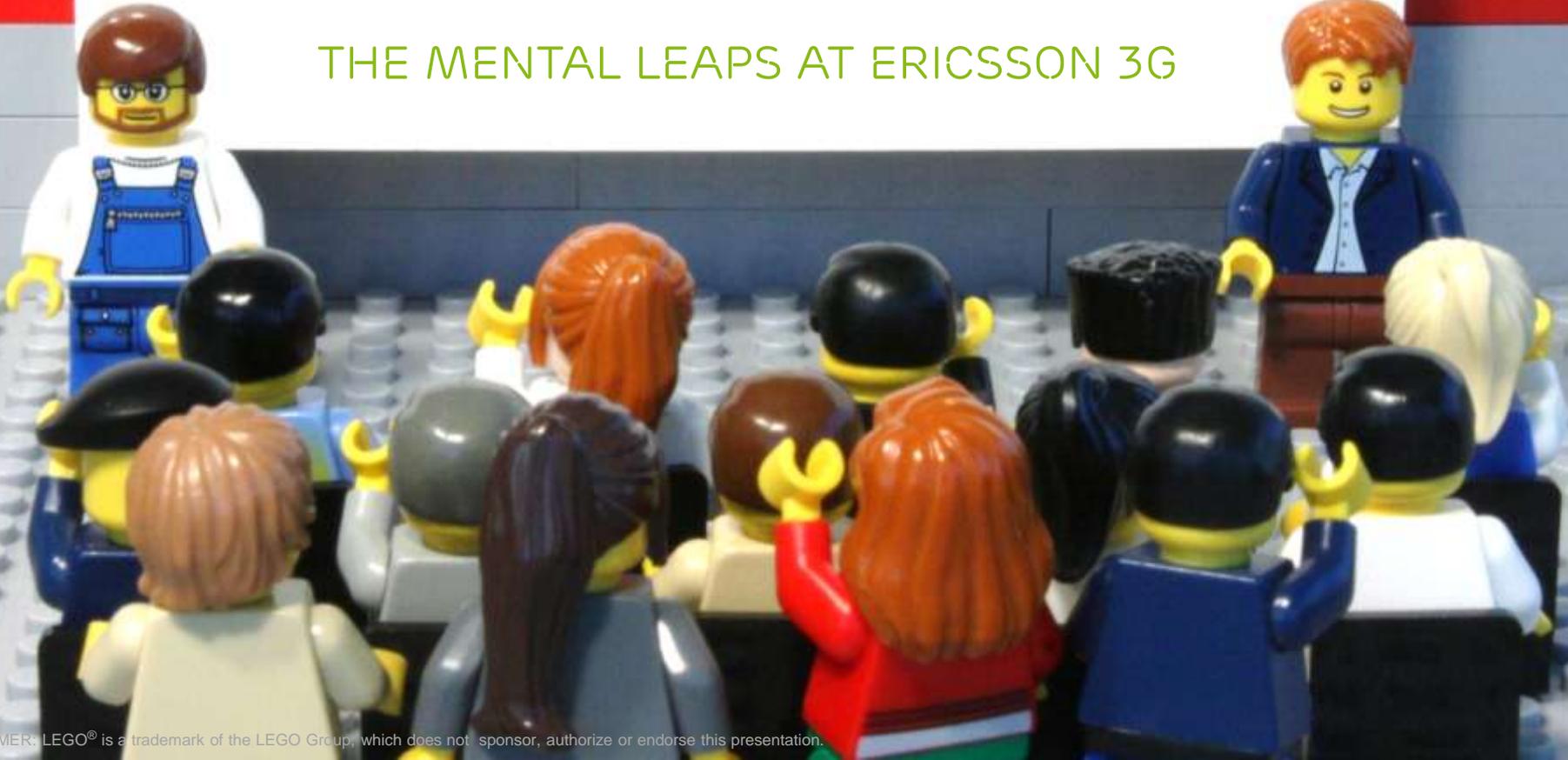
Q&A

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Agile 2014 Mobile App

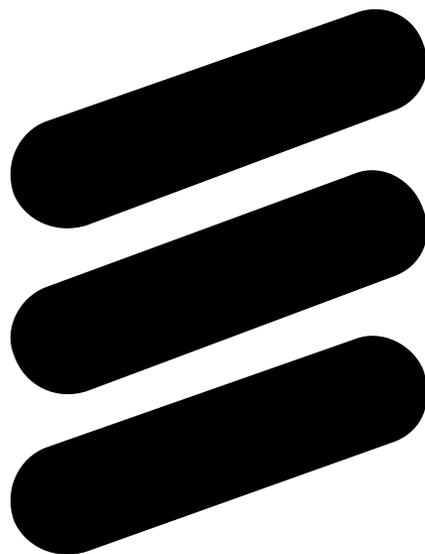
Session QR Code

Session URL



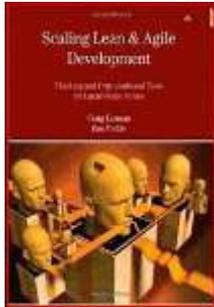
The best presentation we've ever made
is always the next one 😊



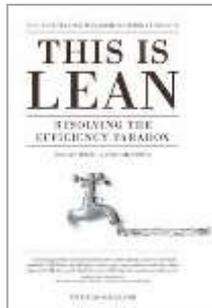


ERICSSON

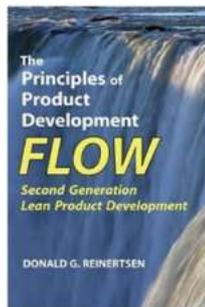
INSPIRATION



Craig Larman & Bas Vodde (2008)
Scaling Lean & Agile Development



Niklas Modig & Per Åhlström (2012)
This is Lean



Donald G. Reinertsen (2009)
The Principles of Product Development Flow