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

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
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

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
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

Radio Network Controller

Radio Base Station

Internet
Telephone networks

Complex Network, Complex Product
WHY CHANGE?
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
THE MENTAL LEAPS
AT ERICSSON 3G

METHODS & TOOLS

PRINCIPLES & MINDSET

RESOURCE EFFICIENCY

FLOW EFFICIENCY

SCATTERED EXPERIENCES

CONTINUOUS INNOVATION

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
INSPIRATION: OUR COLLEAGUES IN FINLAND ...

Customers

Product Management

Product Backlog

Product Owner

PPO

XFT1 ScM

Continuous Integration

Main software branch

Release Verification

PPO Product Proxy Owner

XFT Cross-Functional Team

ScM Scrum Master

@hakanforss @erik_schon | @ericsson | © Ericsson AB 2014 | July 29, 2014 | Page 14
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 ...

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
PRINCIPLES & MINDSET: ... TO SMALL BATCHES
TRY: IMPROVEMENTS AS SMALL EXPERIMENTS
TRY: ELEPHANT CARPACCIO

1. Original Feature
2. Split Feature
3. Split Feature
4. Split Feature

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

Kudos to @totheralistair & @henrikkniberg
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

VISUALIZATION ROOM

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

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
Point to the destination
Small batches
Global awareness
THE MENTAL LEAPS AT ERICSSON 3G

METHODS & TOOLS

RESOURCES & EFFICIENCY

SCATTERED EXPERIENCES

PRINCIPLES & MINDSET

FLOW EFFICIENCY

CONTINUOUS INNOVATION

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
What can I start next?

As long as I’m busy …
INSPIRATION: WHAT IS LEAN?

Prioritize flow efficiency
Prioritize continuous learning

Flow Efficiency

Resource Efficiency

High

Low

Niklas Modig
Stockholm School of Economics
@LeanOnMySelf

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
INSPIRATION: WHAT IS LEAN?

Prioritize flow efficiency
Prioritize continuous learning

Niklas Modig
Stockholm School of Economics
@LeanOnMyself

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
INSPIRATION: WHAT IS LEAN?

Prioritize flow efficiency
Prioritize continuous learning

Flow Efficiency

Resource Efficiency

Low

High

Niklas Modig
Stockholm School of Economics
@LeanOnMySelf
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

Cumulative number of features

Pre-
Prestudy

Prestudy

Development

Launch

Time

Work in Process (WIP)

Lead-Time

Throughput

@hakanforss @erik_schon | © Ericsson AB 2014 | July 29, 2014 | Page 35
TRY: LOVE YOUR BLOCKERS

Faulty licences 5%
Software package problems 22%
Network design bottleneck 28%
Lab IT support missing 11%
Installation people missing 17%
Network template new network 17%

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

Arrival

Departure

Admission Control

Congestion Control
TRY: ACTIVE FLOW HANDLING

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

End-to-end visualization
Story-telling around flow
Active flow handling
THE MENTAL LEAPS AT ERICSSON 3G

METHODS & TOOLS

PRINCIPLES & MINDSET

RESOURCE EFFICIENCY

FLOW EFFICIENCY

SCATTERED EXPERIENCES

CONTINUOUS INNOVATION

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
AVOID: COMPLEX YEARLY SCORECARDS ...

GF/Other BU
- High quality deployment of new releases
- Total Cost of Ownership

BNET SC
- Established Network Transformation
- Increased Sales of PAIB Portfolio
- Secured Profit Improvement
- Key new products ready for the market
- Demonstrated Technology leadership
- Strengthened resource and competence mgmt
- People and organization readiness

PA/DURA joint targets
- Customer Perception of Quality in WCDMA RAN
- RBS 6000 Multi Standard config. GA on time
- Improved Portfolio Efficiency
- BNET/BUGS cooperations
- Technology leadership
- Increased focus on competence mgmt

DURA targets
- Improved Forecast Precision within DU Radio
- Increase DURA I&V efficiency
- Portfolio efficiency: Converged RBS Architecture
- Raised Product Quality
- Creative environment

PARA targets
- Orders Booked
- Product contribution
- Market leadership
- Introduction of new price model
- Reinvent the network

- O&M leadership
- Customer responsiveness
- Str. Resource and competence mgmt
- FCI higher than /// average
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

Innovation = value from ideas in product and product development

Planning with less than full utilization creates environment for innovation
 TRY: CONTINUOUS INNOVATION TOWARDS THE VISION

Small experiments towards next challenge
TRY: LEARNING DAY

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 every produced is the next one.

Enzo Ferrari
Founder & CEO, 1898-1988

Source: Peter Blackert, http://www.flickr.com/search/?w=29987108@N02&q=ferrari%20458%20italia%202010

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
THE MENTAL LEAPS AT ERICSSON 3G

METHODS & TOOLS

PRINCIPLES & MINDSET

RESOURCE EFFICIENCY

FLOW EFFICIENCY

SCATTERED EXPERIENCES

CONTINUOUS INNOVATION

DISCLAIMER: LEGO® is a trademark of the LEGO Group, which does not sponsor, authorize or endorse this presentation.
WHAT MIGHT BE YOUR NEXT MENTAL LEAP?

2 minutes discussion in pairs
Q&A

THE MENTAL LEAPS AT ERICSSON 3G
WE WELCOME & VALUE YOUR FEEDBACK!

Face-to-face

Online
Twitter: @hakanforss @erik_schon #Agile2014
Agile 2014 Mobile App
Session QR Code
Session URL

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