



Peter Palmér
Global Lean Agile Transformation

LPPDE In-Person Conference
North America 2024
Transforming Innovation for Enterprise Excellence

Milwaukee, WI
September 30 - October 3, 2024

 **LEAN PRODUCT AND PROCESS DEVELOPMENT EXCHANGE**
The Science of Improving Innovation

In partnership with:
 **AC Smith**
Innovation has a name.

**Peter Palmér**

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Transformation Office
Scania

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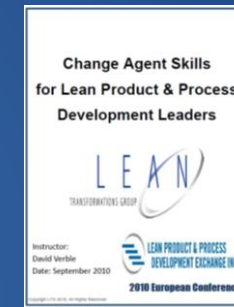
Active and interested learner of ways of improving faster and increasing customer value, like lean product development, lean leadership...

- Transformation Office, Scania
- Extensive experience in lean management in both production and product development, as well as experience of leadership in other cultures.
- Frequent speaker at international and national conferences on various topics within LPPD and leadership
- Many years cooperating with LPPDE, current chair
- Co-developed LPD training courses with Chalmers professional education and KTH Royal Institute of Technology



Past Events

2008, April 21-23	Denver, Colorado
2009, April 6-8	Hilton Head, South Carolina
2010, April 20-22	Hilton Head, South Carolina
2010, September 8-9	Södertälje, Sweden
2011, April 26-29	San Diego, California
2011, September 19-22	Gothenburg, Sweden
2012, May 1-3	Indianapolis, Indiana
2013, June 3-5	Amsterdam, Netherlands
2013, September 9-11	Savannah, Georgia
2014, June 2-4	Copenhagen, Denmark
2014, September 22-24	Raleigh, North Carolina
2015, September 14-16	Austin, Texas
2016, April 25-28	Reading, UK
2016, September 26-28	Philadelphia, Pennsylvania
2017, April 24-27	Paris, France
2017, September 18-21	San Jose, California
2018, April 23-26	Paris, France
2018, October 1-4	Columbus, Ohio
2019, June 11-13	Malmö, Sweden
2019, October 21-24	Jekyll Island, Georgia
2020, September 9	Helsinki, Finland – Virtual
2021, May 19-20	Helsinki, Finland – Virtual
2021, October 12-13	Newport, Rhode Island – Virtual
2022, May 3-6	Helsinki, Finland
2022, October 3-6	Newport, Rhode Island
2023, April 24-26	Munich, Germany
2023, October 2-5	Ann Arbor, Michigan
2024, May 13-15	Stockholm, Sweden
2024, September 30 - October 3	Milwaukee, Wisconsin



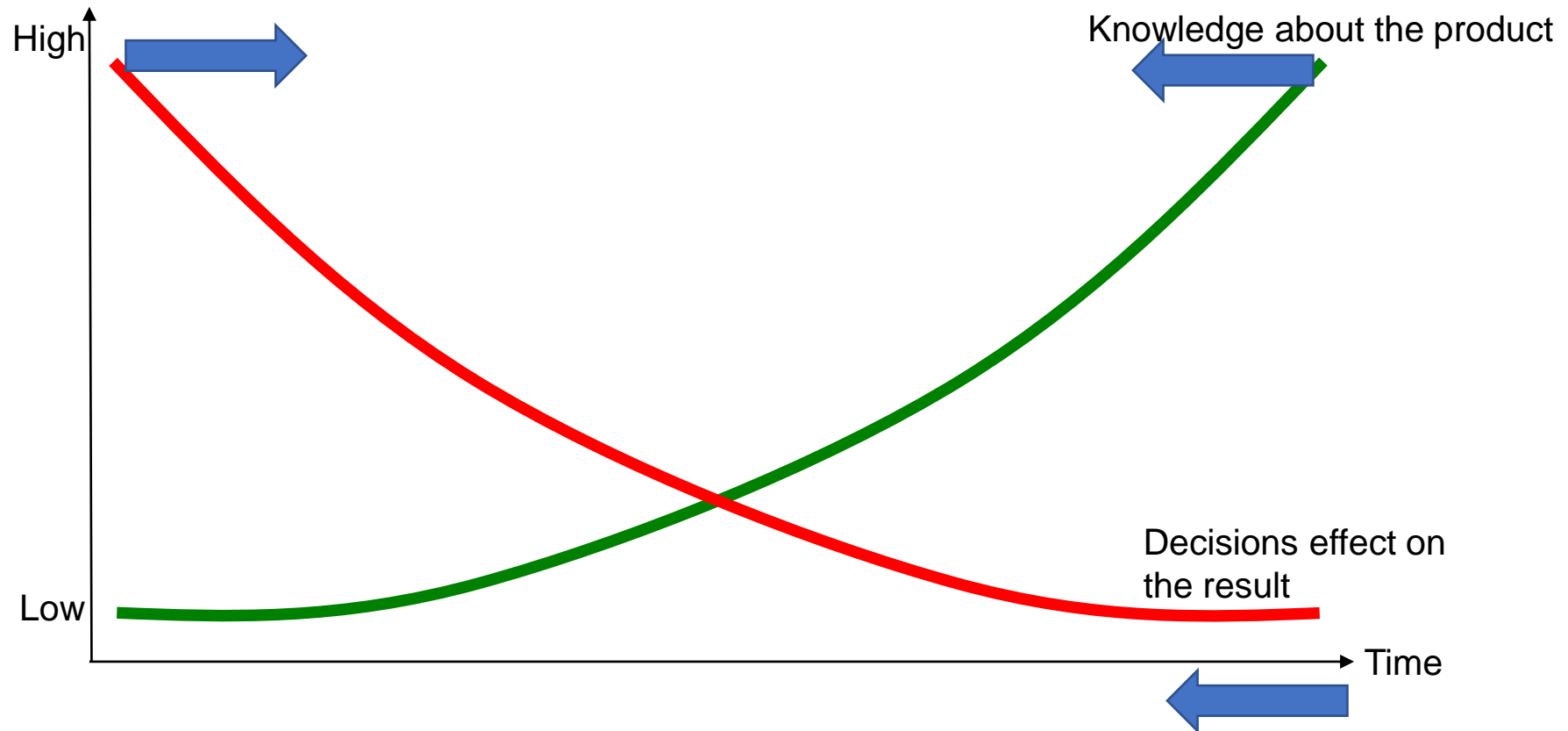
2024 October 1 Peter Palmér

29th!

A Journey - Lean Agile Transformation



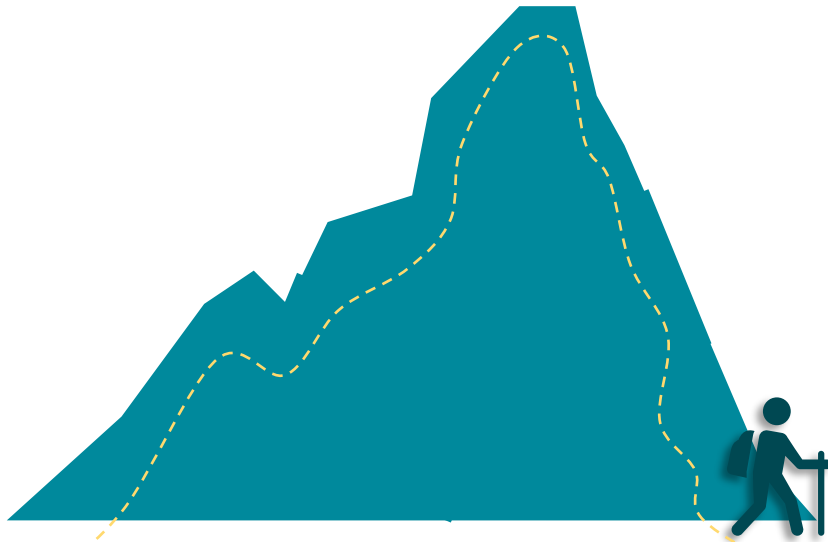
The designer's dilemma



Our industry is currently undergoing the greatest shift since the introduction of the internal combustion engine

The old Paradigm

Where the Internal Combustion Engine was dominant



Key Characteristic Examples

Predictable Environment

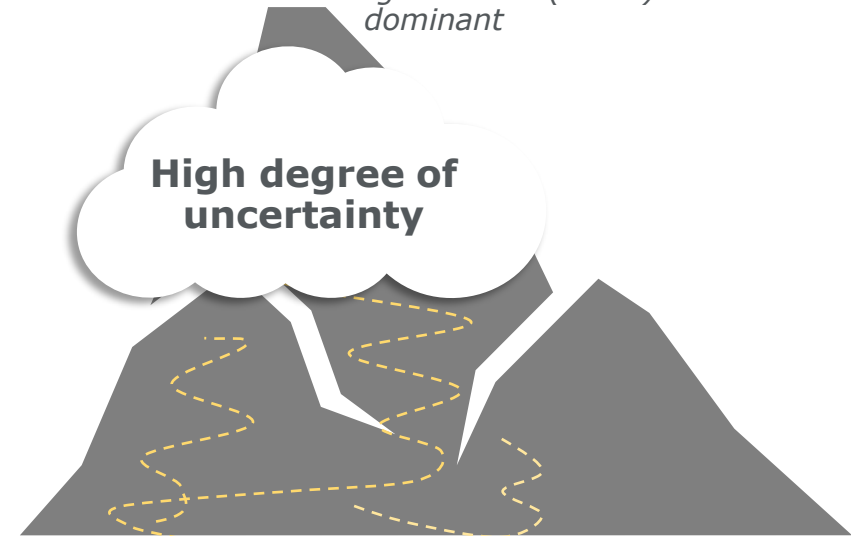
Incremental Improvements

ICE-Technology

Flexible Product Offering

The New paradigm

Where Automation, Connectivity, Electrification & Digitalization (ACED) will be dominant



Key Characteristic Hypotheses

Unpredictable Environment

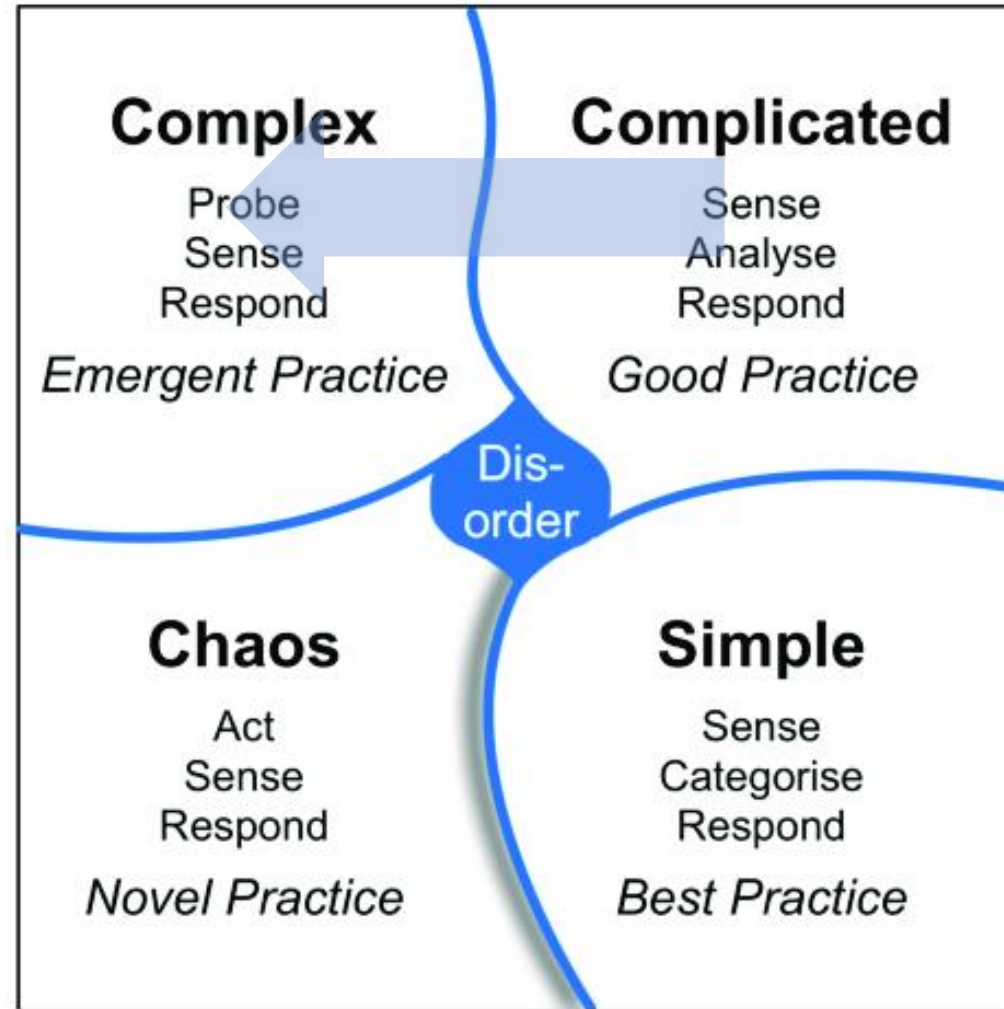
Development Step Changes

Software & Electrification Technology

Integrated Complete Solutions

Going into the new paradigm, we need learn to better manage uncertainty. And to challenge how we historically have done things, transforming into what makes us fit for the future

Complexity is increasing in Product Development



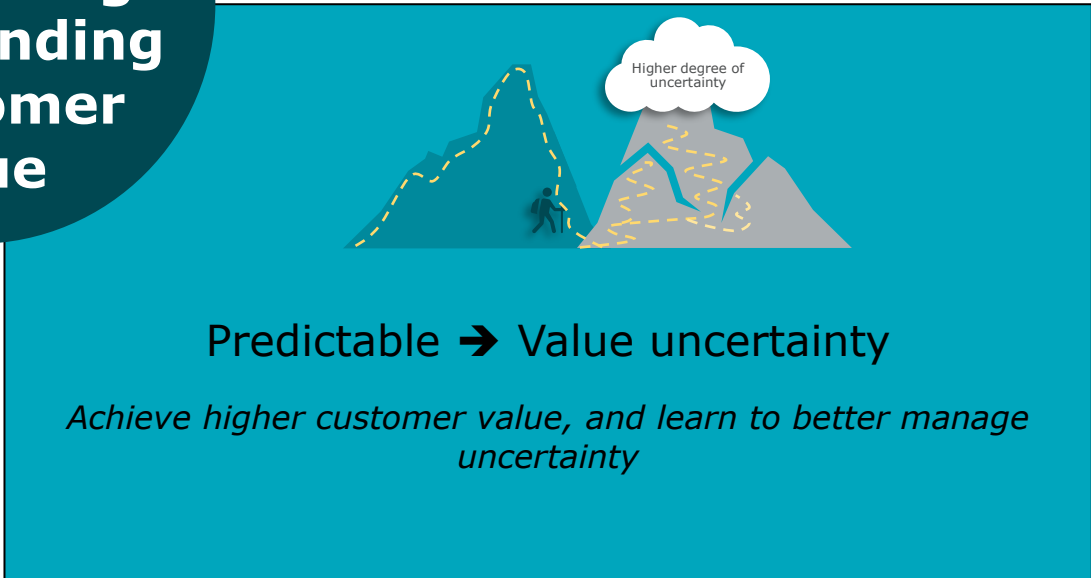
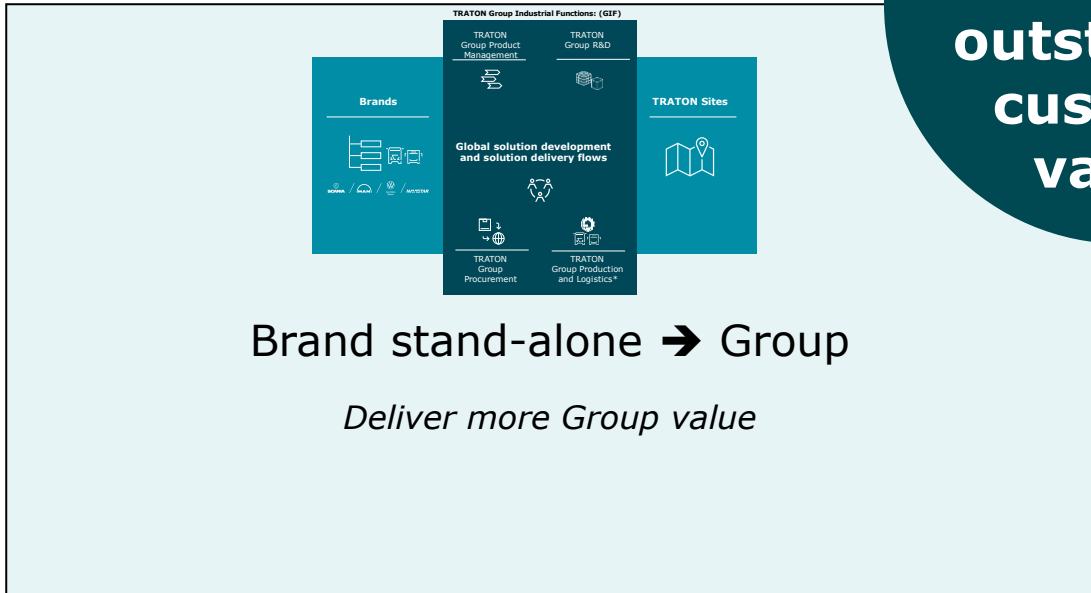
Manage complexity by

- More decisions/time unit (More people take decisions)
- Sense and adjust (vs predict and plan)
- Encapsulate complexity in teams
- Customer value pull

Cynefin Framework, Dave Snowden (1999)

We are entering one transformation with two complementary journeys

One strong Group delivering outstanding customer value



Our purpose

Transforming
Transportation Together.

FOR A
SUSTAINABLE
WORLD.



Truck
Bus

We use our core values and thinking model

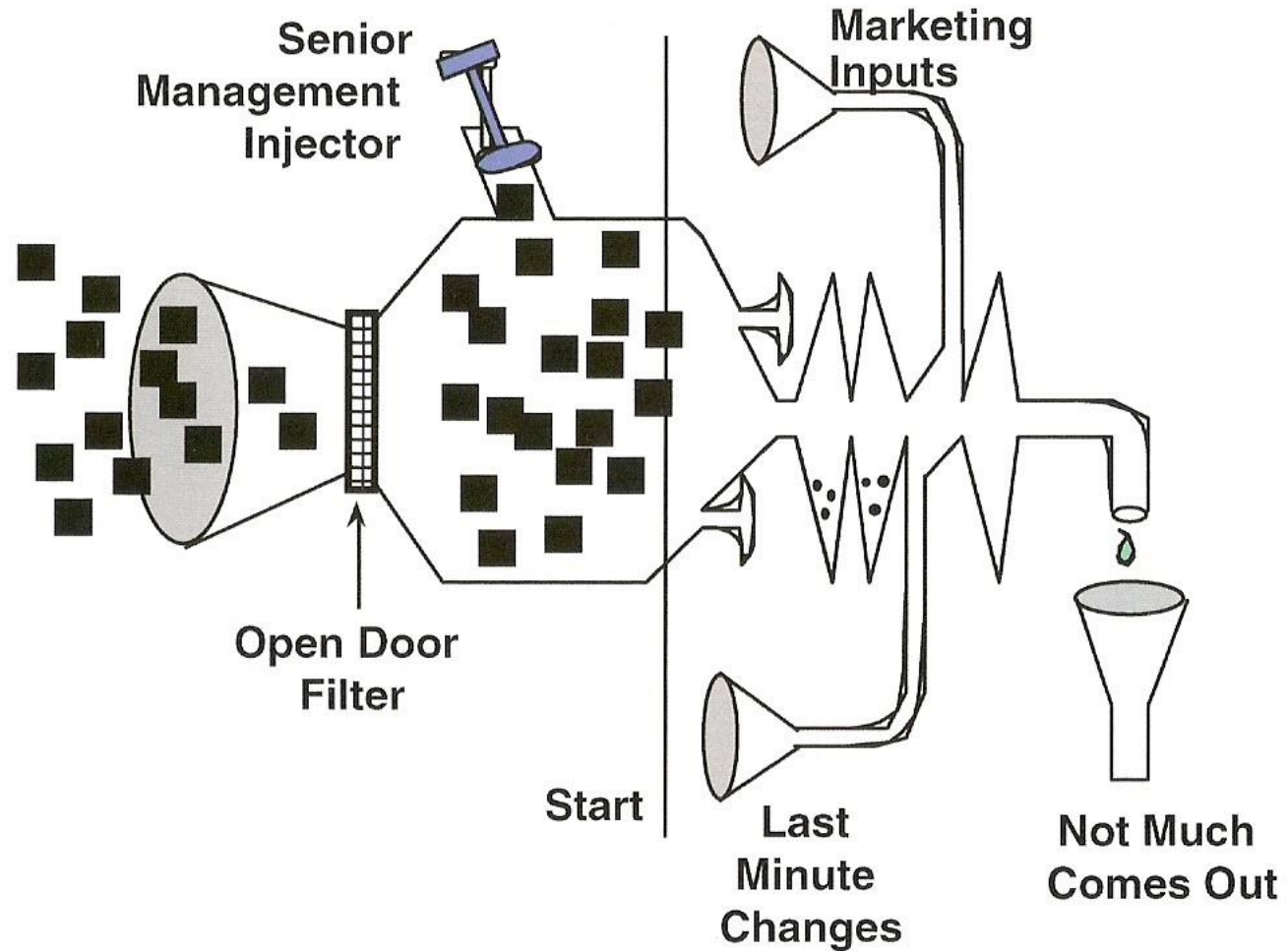
– Common core values



– Thinking model



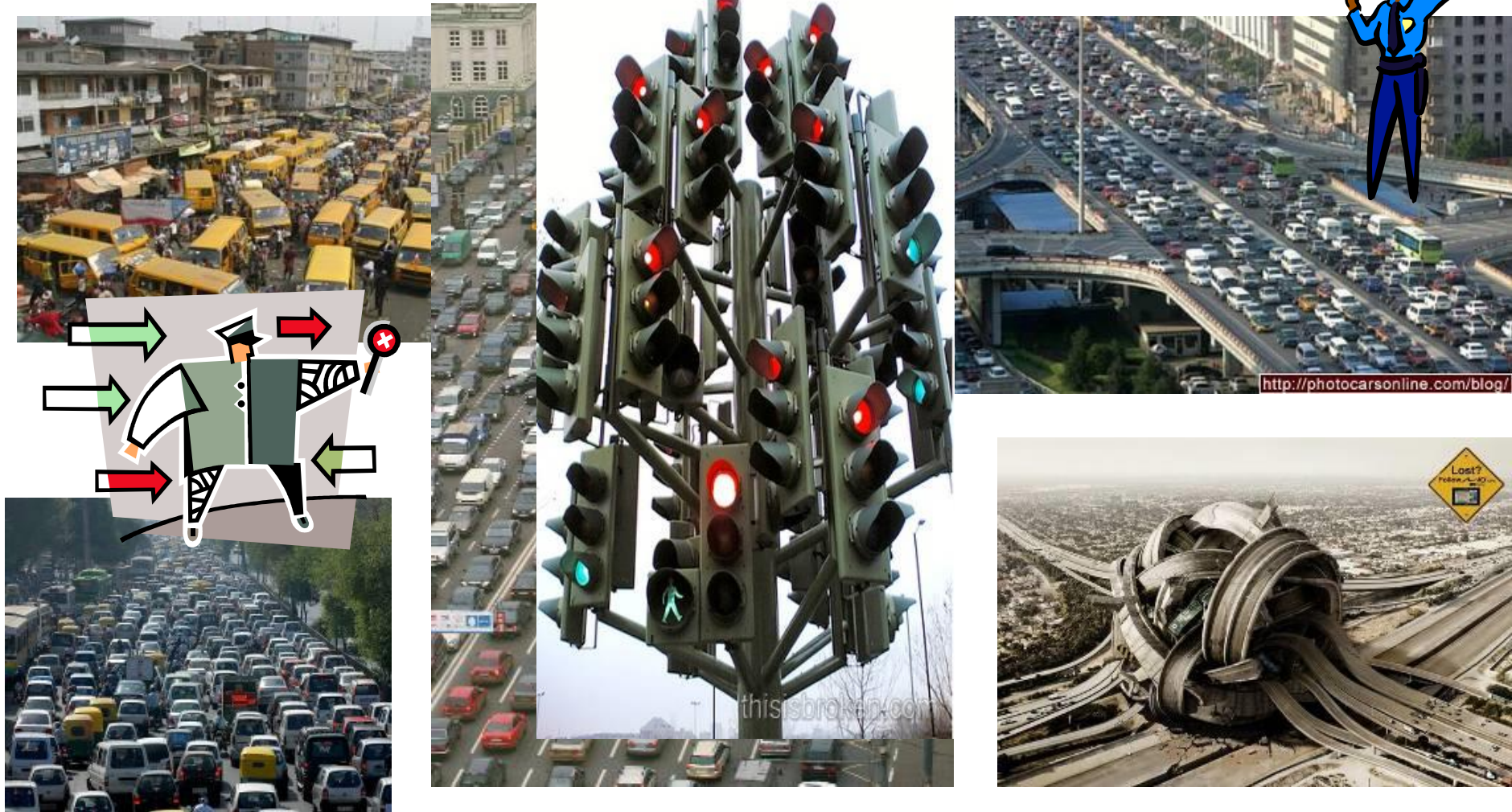
Start with your current state



Start with your current state – A typical project management system



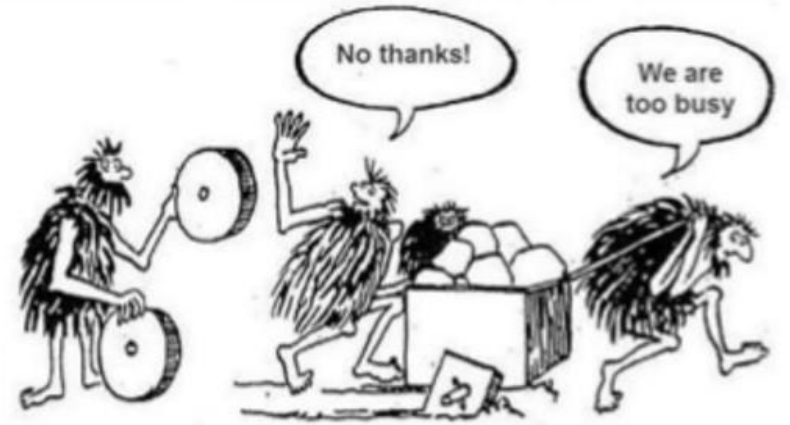
Start with your current state – Are you managing congestion



Willingness to change

Don't focus on who!

WIIFM – Often afraid of a having a personal, worse situation or afraid it won't work for the company



I am proud of our history and products



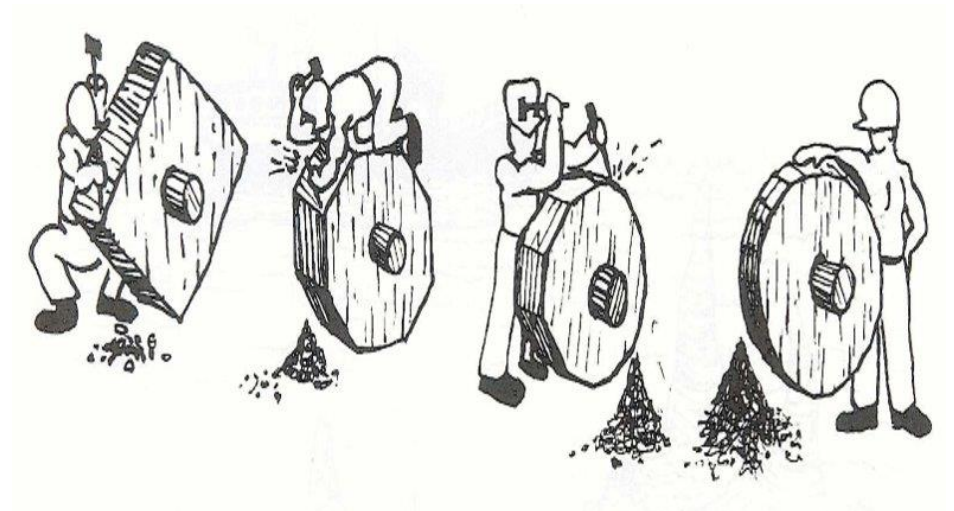
1936



We are proud but not satisfied!

We always want to improve...

The more we improve, the more potential we see...



Culture

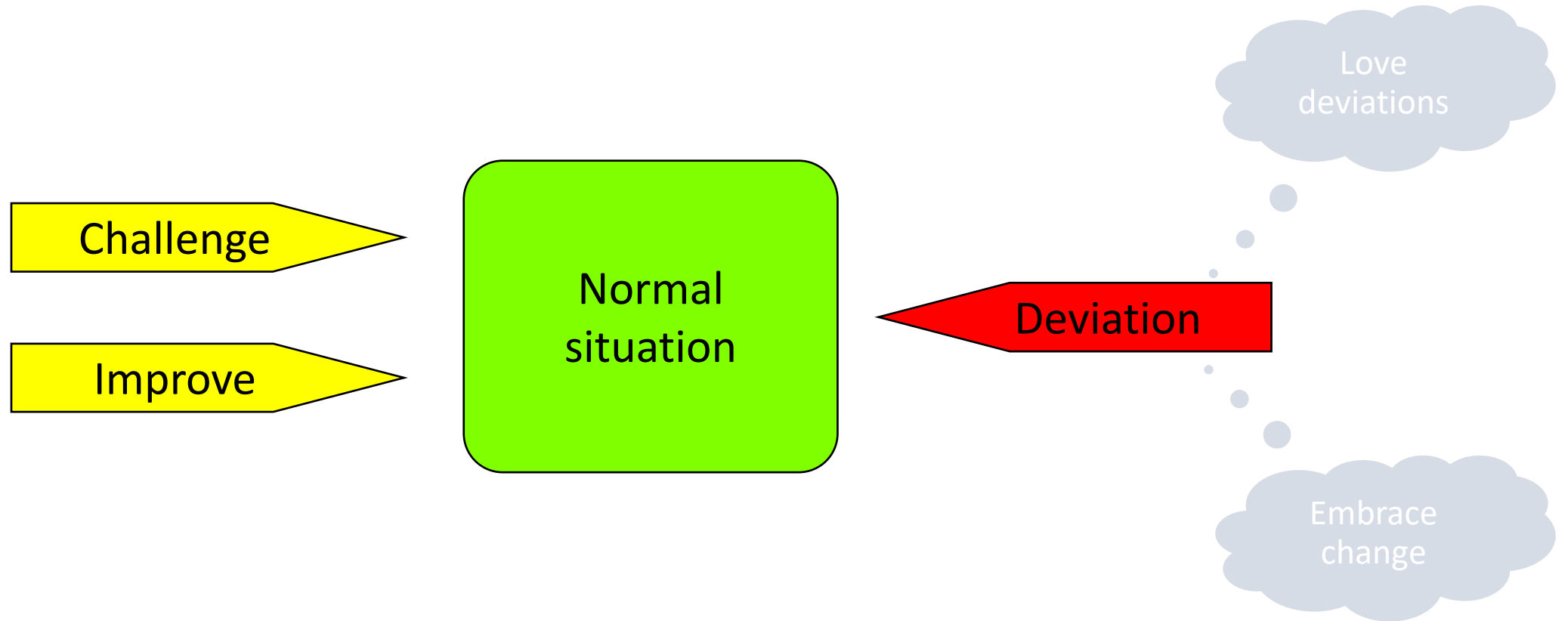
The Scania spirit

- Continuous Improvements
- Normal – abnormal?
- Customer
 - Quality
 - Deliver

Love deviations



Continuous Improvement



Train and teach – One message



Go and see – Ask questions, listen to the answers



Navigation chart

Gå & Se för R&D Strategi

R&D Desired State
 Friska och motiverade medarbetare
 100% Nöjda kunder
 100% Leveransprecision
 Ledaren är stolta över sina medarbetare
 Utvecklingen av satsningen med fokus på kundvärde
 Avvikelsestyp: - Halverad leveransstid
 Kreativ arbetsmiljö med mer tid för innovationer
 Bästa i klassen på att leverera både definierade och
 ännu inte definierade kundvärden

Fokusområde
 Franchiserade och annan lever

Mått
 Leveransprecision

Förväntad effekt
 Gruppens kund är tydliggjorda
 Gruppen har överenskommen med sina kunder om:
 - Vilka leveranserna är
 - Innehållet i leveranserna
 - Anslutning från transaktioner

Förväntad kostnad
 Gruppens sammanliga utgåvor och rörelse och rörelse
 Gruppen säkerställer kvaliteten till relevanta aktiviteter per individ som är fidsatta
 De är tydligt vilka av leveranserna som lever på projektens kritiska linje

Förväntad risk
 Symning mot plan sker med minst veckofrekvens för att säkra gruppens leveranser
 Varje individs aktiviteter är synliga i gruppens plan
 Tydliga eskaleringsvägar och respons inom 24h
 Respekt och metoder för klappning framåt
 Tid för att hantera relevanta avvikelser finns i planen
 Symning mot plan sker med dagstakt för att säkra gruppens leveranser

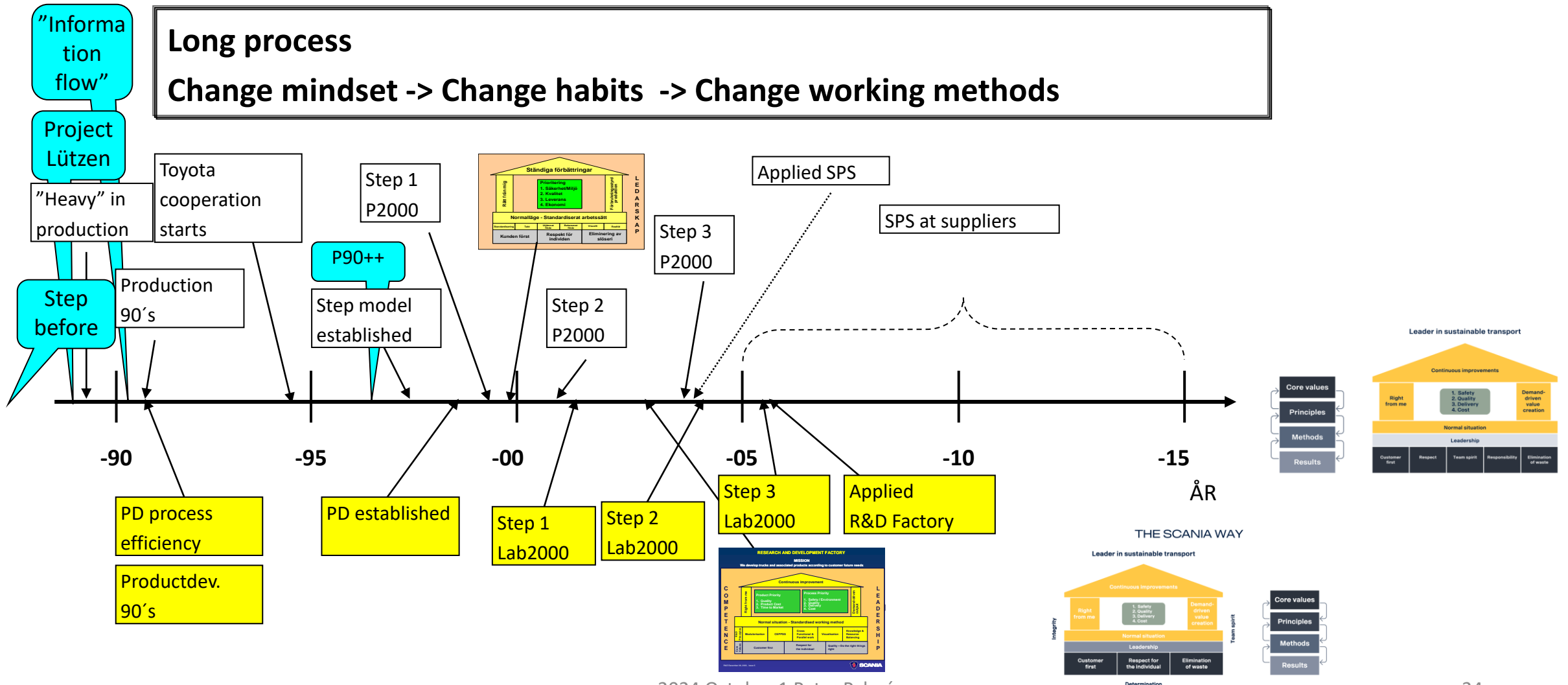
Förväntad risk
 Gruppen mäter och styr mot KPI:er som leveransprecision, antal öppna avvikelser och FQ:n
 En tydlig visualisering av läge och trend för övervakning finns
 Arbetsätt som säkerställer att upptäckta avvikelser inte stör kund och att lärtjänst återförs
 Förbättringsarbetet används för att säkerställa att vi fokuserar på de avvikelserna som hindrar oss att nå R&D Desired State
 Systematik för att lära av missten och uppdatera konstruktionsavsnitt, arbetsrutiner, etc.

Förväntad risk
 Friska och motiverade medarbetare
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Kärnvärden
 Principer
 Metoder
 Resultat

Visa på lämpliga metoder
Fråga efter resultat

Perspective on improvement work



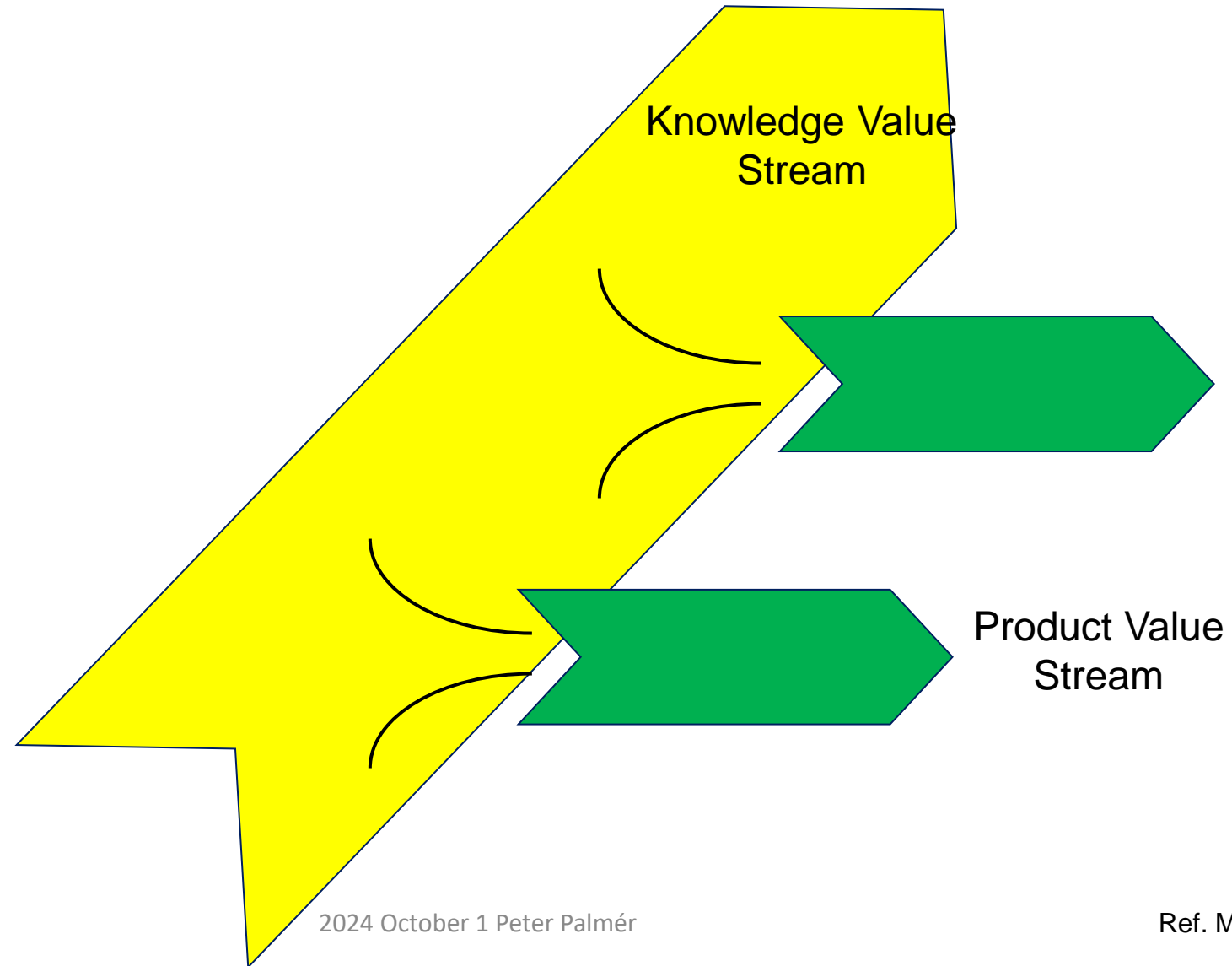
The theory

...or theories

Different schools

- Assure that new products are adapted to Lean Manufacturing
- Apply methods for Lean Manufacturing on PD
- Toyota Product Development System (everything Toyota does is correct and the best)
- Principle based view (new methods are checked against lean product development principles if they are applicable)
- Problem based view (new methods are introduced if needed)
- Good methods (which already exist) are called lean to empathize them more





Lean Development Principles

- Focus on creating usable knowledge
 - Eliminate waste
 - **Synthesize knowledge into trade-off curve pages**
- Lead with entrepreneur system designers
- Create teams of responsible experts
- Practice set-based innovation
- Create flow
- Visual Management and Planning



Source: Allen Ward

Manifesto for Agile Software Development

We are uncovering better ways of developing software by doing it and helping others do it.
Through this work we have come to value:

Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Kent Beck
Mike Beedle
Arie van Bennekum
Alistair Cockburn
Ward Cunningham
Martin Fowler

James Grenning
Jim Highsmith
Andrew Hunt
Ron Jeffries
Jon Kern
Brian Marick

Robert C. Martin
Steve Mellor
Ken Schwaber
Jeff Sutherland
Dave Thomas

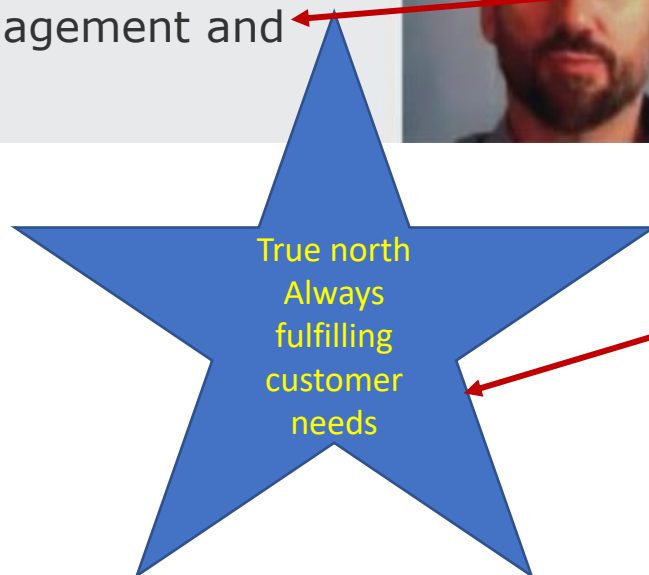
Lean Development Principles

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Agile Principles

- Working Software
- Individuals and Interactions
- Responding to Change
- Customer Collaboration



Source: Allen Ward



Product Development

We need to Transform four capabilities across TRATON to Transform Transportation Together

Speed & Flexibility

Quickly deploy new solutions and strategies while being able to react to changes and adapt as we go

Develop & Deliver solutions

Understand, develop and deliver solutions that fully support the customers' needs

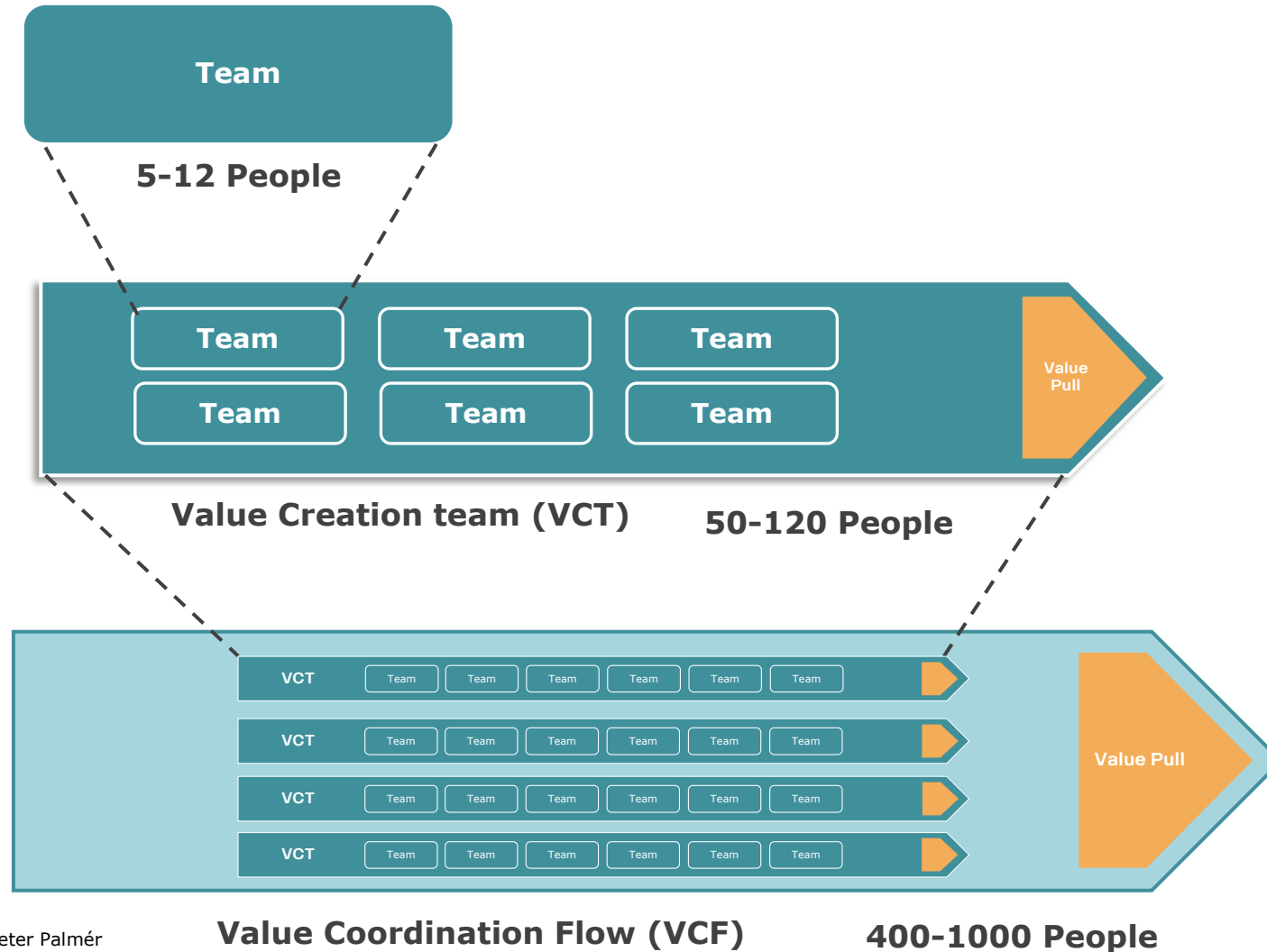
Customer collaboration

Explore business opportunities and drive the shift in close interaction with the customers

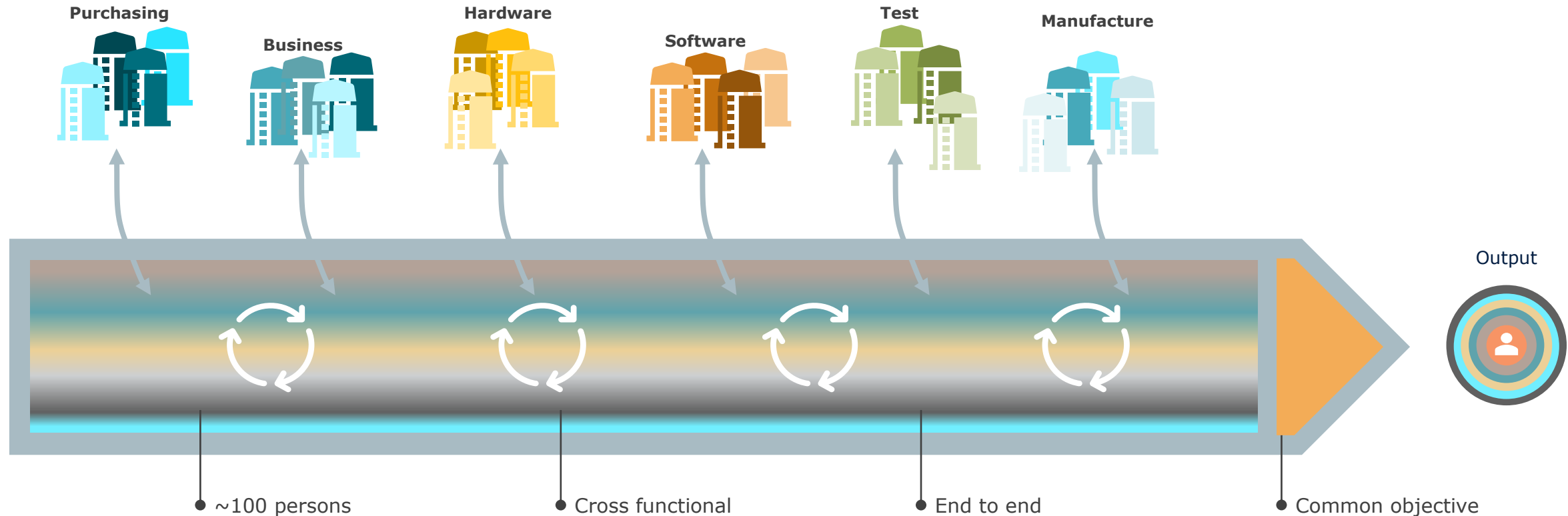
People engagement

Inspire, empower and unleash the will to drive the shift

With these three layers, we can cross-functionally develop end-to-end solutions of different magnitudes

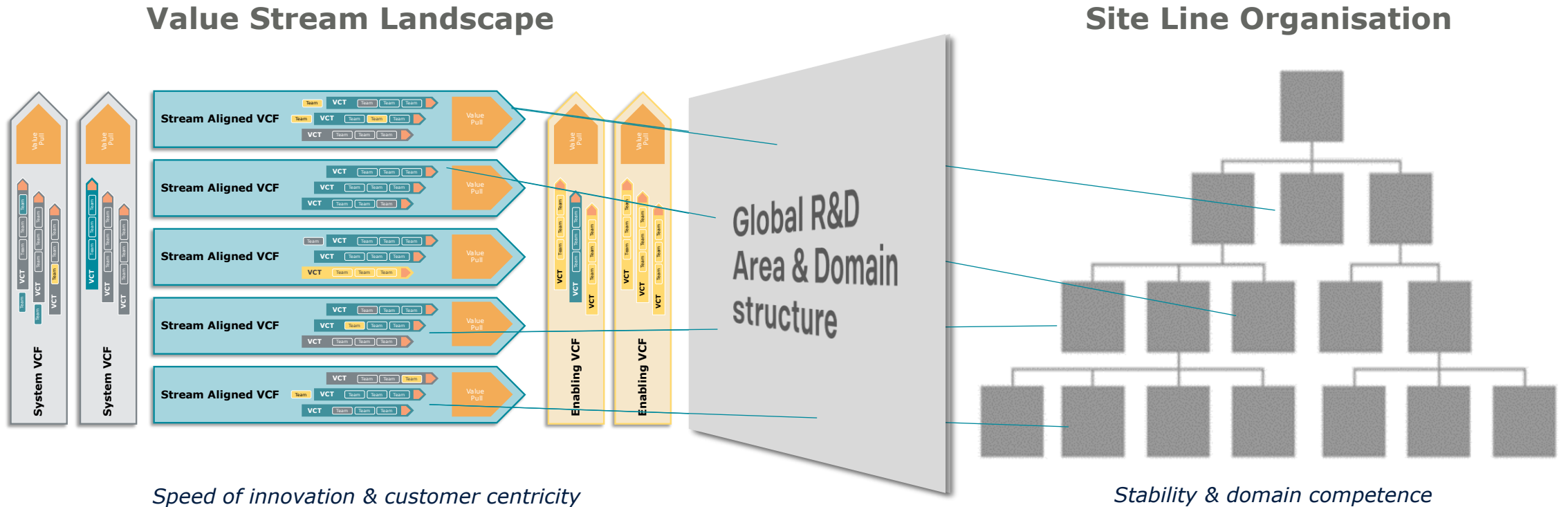


Instead, start working in value streams, with all necessary competence within the same global flow



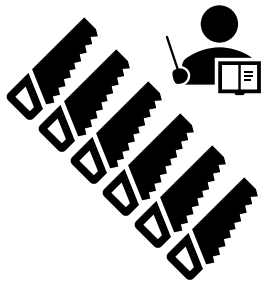
▶ **Aiming to create a global flow that is customer centric, organized around value and that delivers value continuously toward a common objective with reduced handovers**

We organise work in Value Streams, but enable Flows through a stable line-organisation

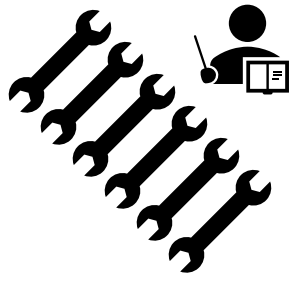


- The Value Stream landscape and the functional line have **different, but important**, roles to fill
- The flow develops solutions. The line develops people.

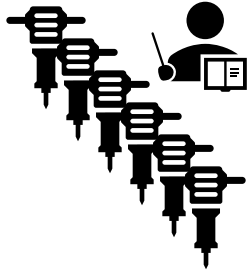
Strive for T-shaped teams and people



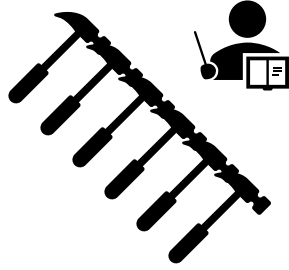
Team saw



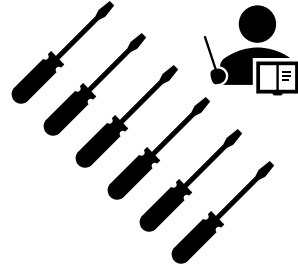
Team wrench



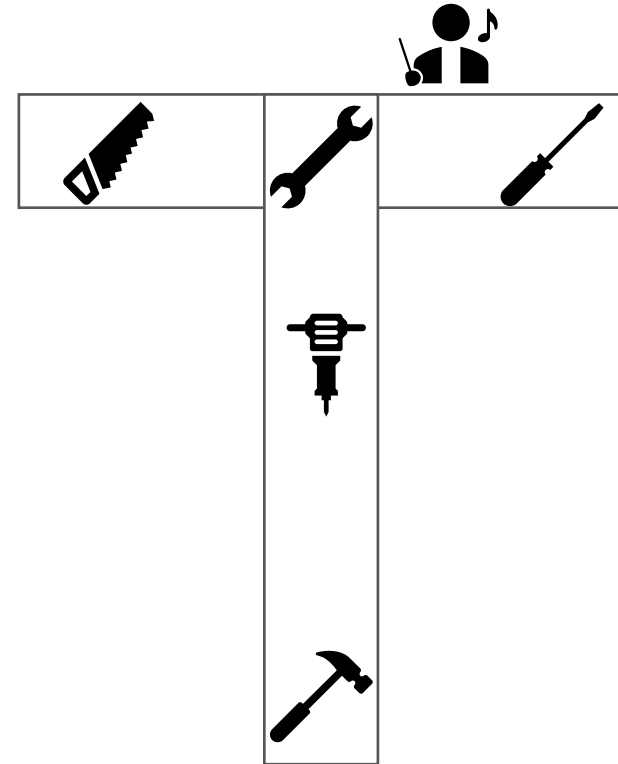
Team drill



Team hammer



Super special team skrew driver

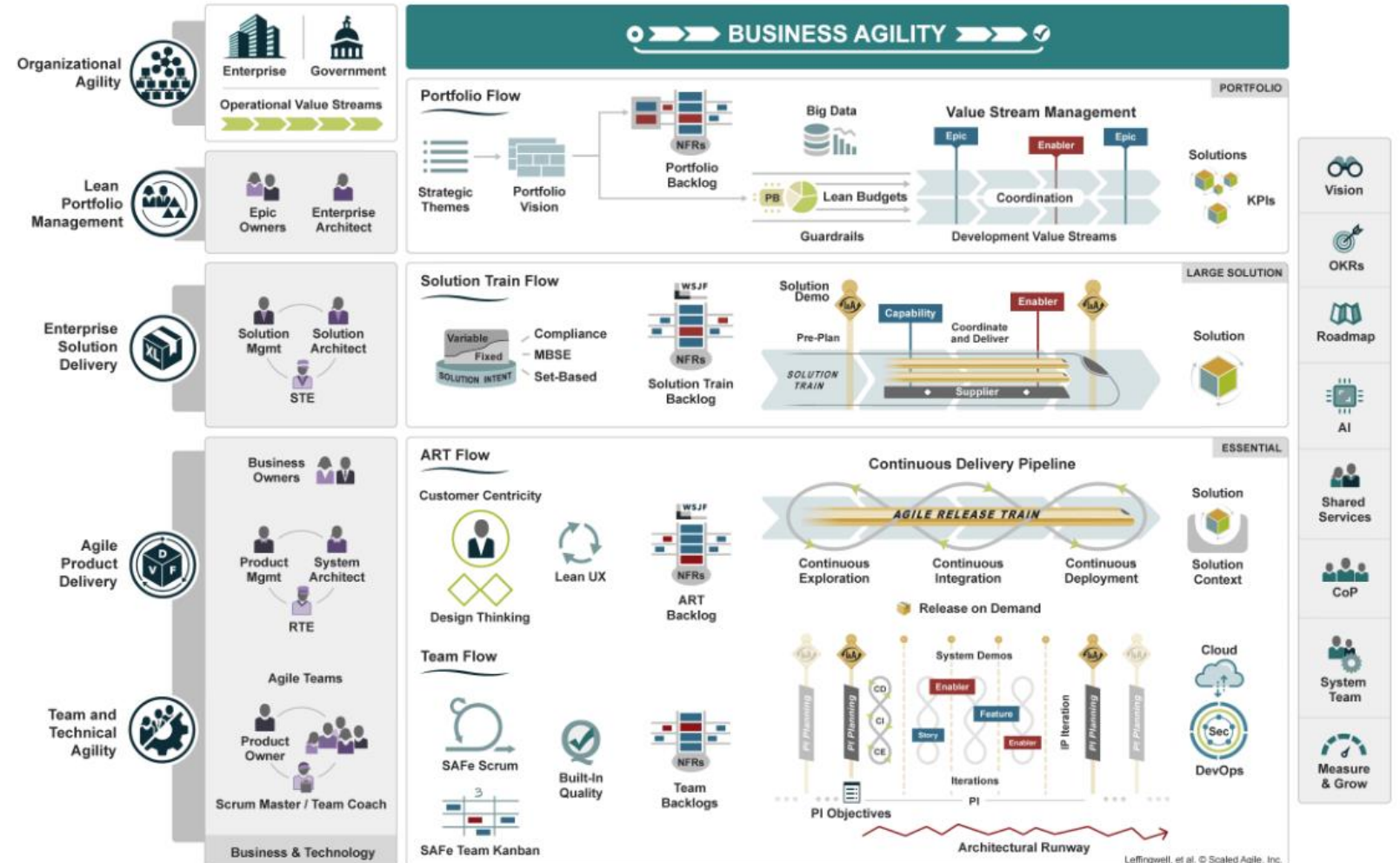


SAFe Framework

SAFe 6.0

Select SAFe configuration

OVERVIEW ESSENTIAL LARGE SOLUTION PORTFOLIO FULL



- Vision
- OKRs
- Roadmap
- AI
- Shared Services
- CoP
- System Team
- Measure & Grow

Leffingwell, et al. © Scaled Agile, Inc.

Which is the best method / tool to use?



Visualization of product development planning

- Visual Planning
- Scrum
- Kanban

Principles:

- Work visible
- Prioritize
- Focus on deliveries and workload
- Manage deviations

Knowledge gaps

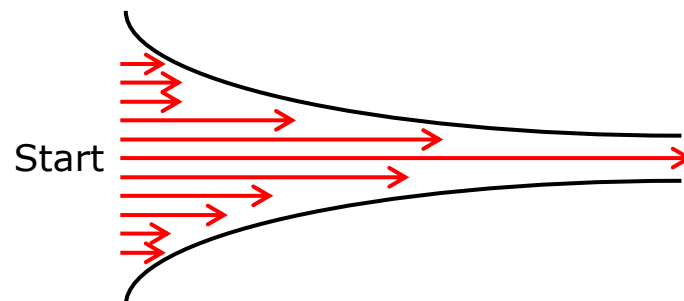
Set-based Concurrent Engineering

Rapid learning cycles

MVP

Work close to the customer

- Try to come up with as many alternative solutions as you can
- Successively eliminate inferior alternatives
- Make all necessary decisions as late as possible



Flow - Optimize Lead Time and Throughput

Early morning



Low traffic density

Very fast

Mid-day



Medium traffic density

Reasonable speed

Late afternoon



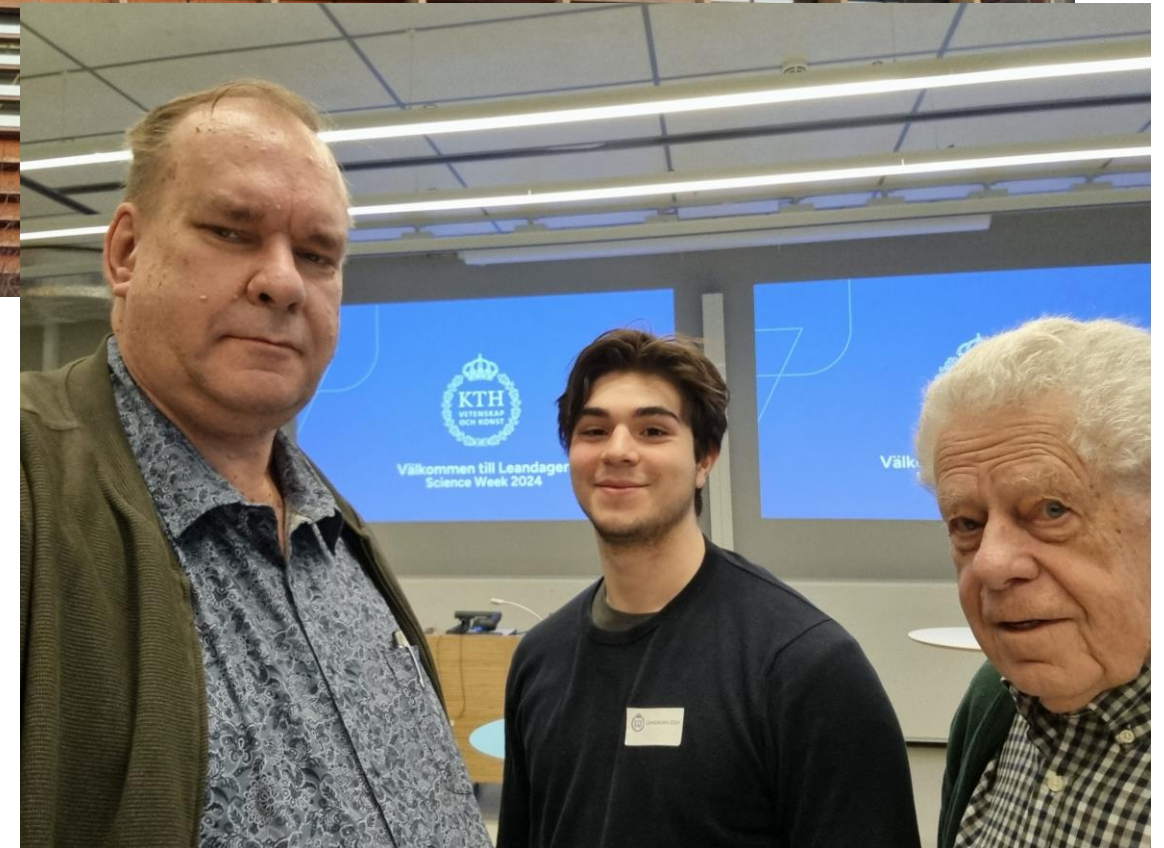
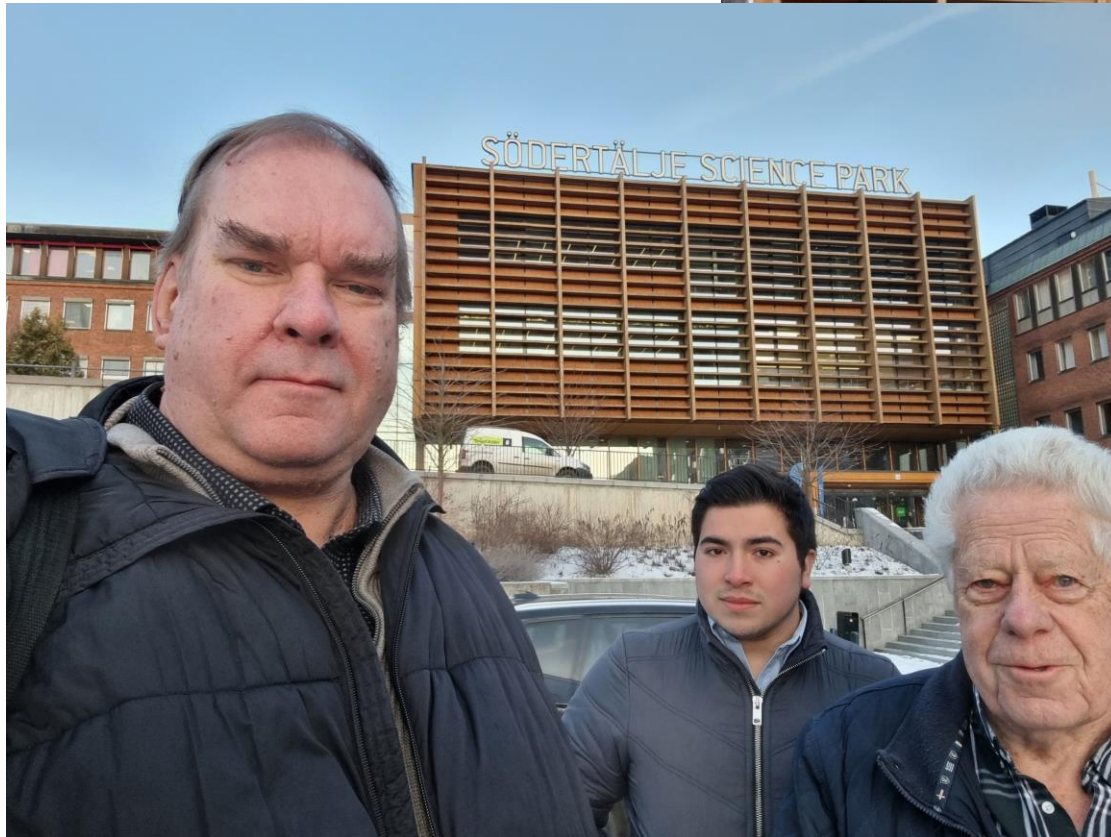
High traffic density

Very slow

Live as you preach



Don't give up



Lean Agile

Lean agile is an including term, meaning we will look at principles and methods that are interesting for us and the problems we need to solve within:

- Agile
- Lean production
- Lean product development
- more



We use books / presentations and write Book-A3s

Success Story: The People Side of Lean Product Development
 Sarah McCarvill, Otto Bock Healthcare

Every enterprise is different – Find your own way to Transform Innovation for Enterprise Excellence



Your own solution

- Define hypothesis
- Run experiment
- Create pilots
- Learn together
- Share and get feedback

Get inspiration and knowledge



*If you keep on doing
what you've always done,
you will get the same result
you've always got.*



Thanks!