



Juggling with the Paradoxes of Agile Transformation

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#2 in wireless networks

#2 in operator services

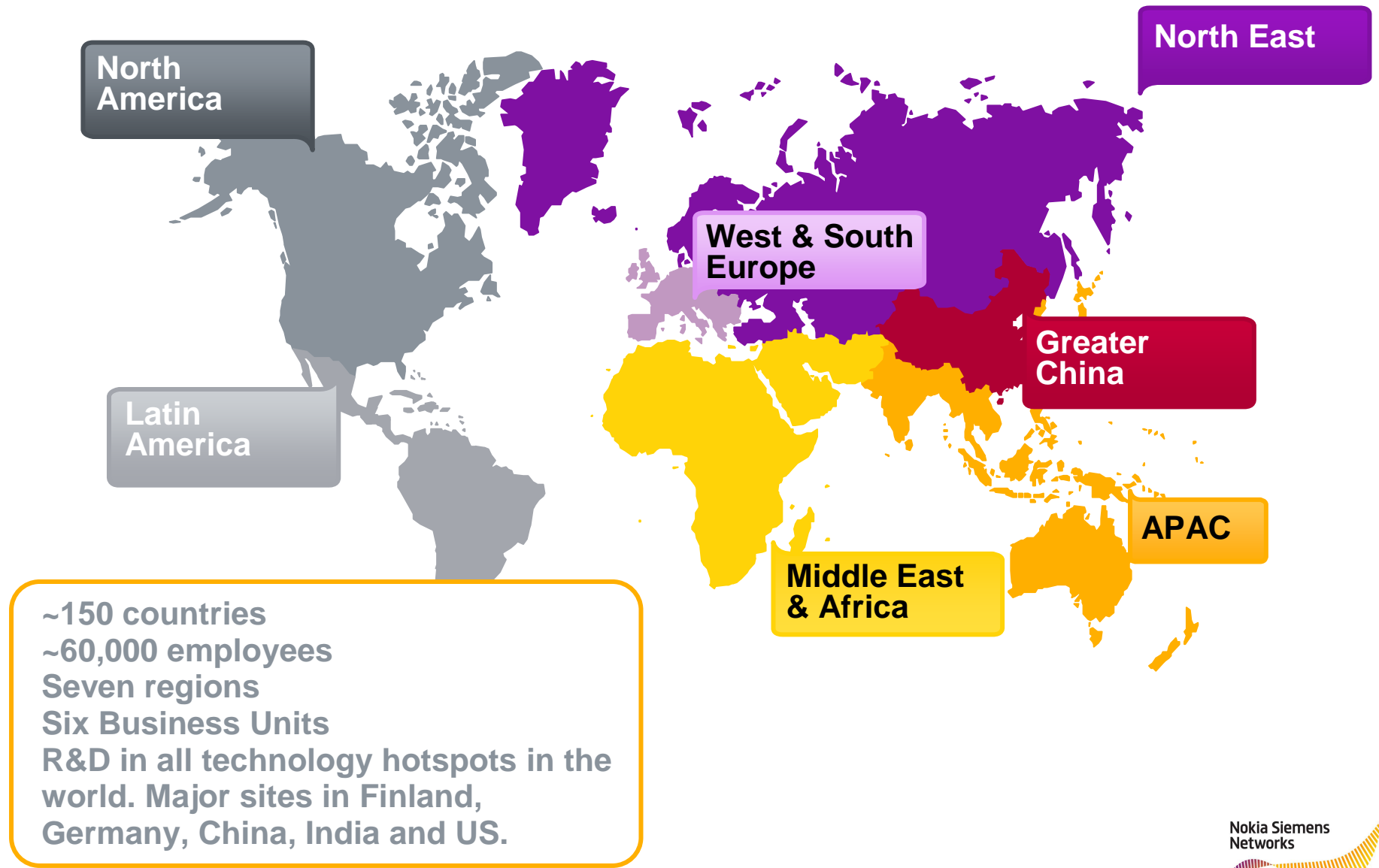
#3 in wireline networks

1400 customers in 150 countries

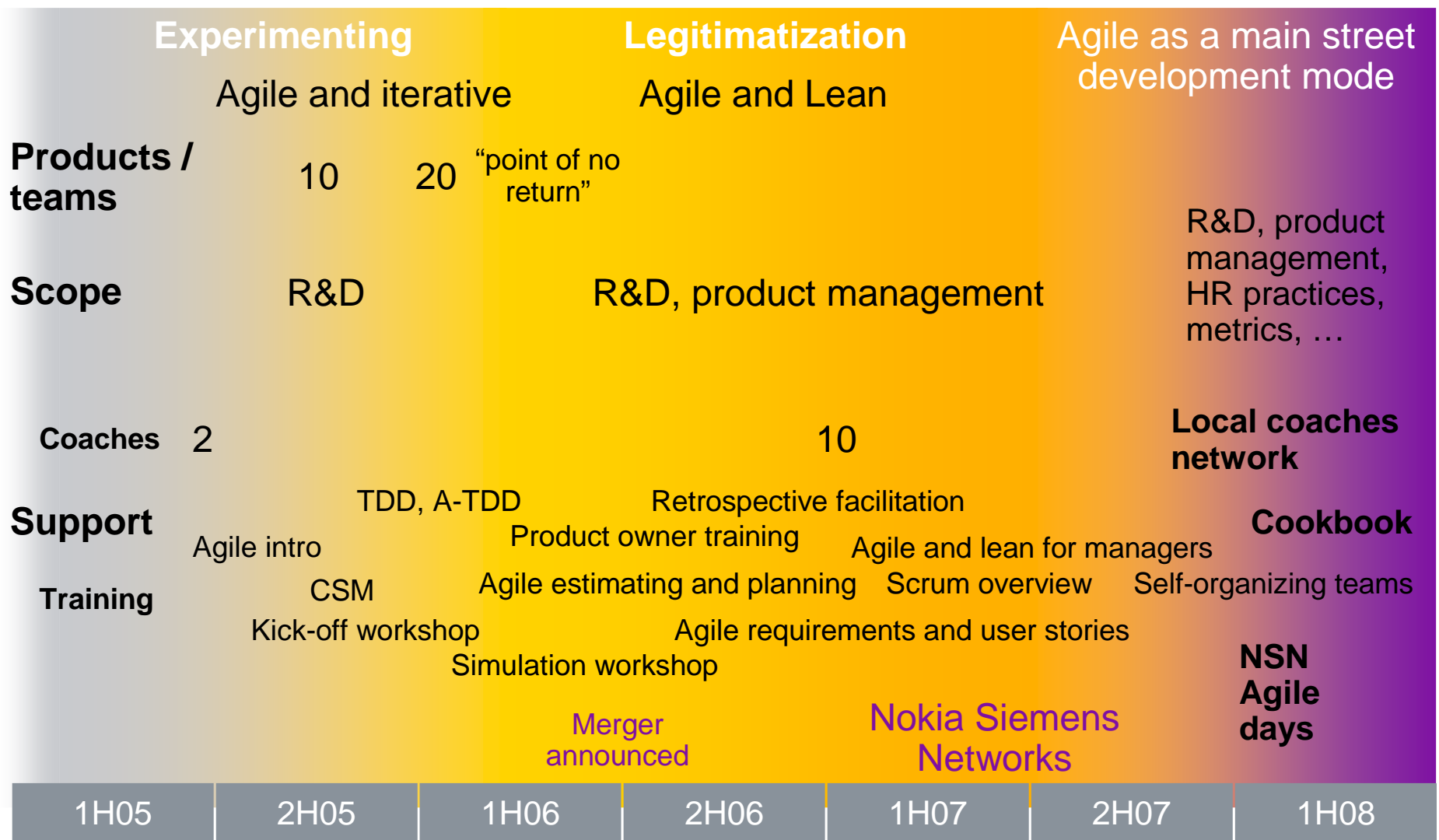
75 of top-100 operators as customers

Over 1 billion people connect through our switches

Global presence



Overview of our agile transformation




NSN target

Increased flexibility and efficiency of product development through Agile development

- Increased flexibility and ability to implement changes
- Customer and value oriented development
- Improved visibility to actual status of development
- Higher engagement and better motivation through self-organized empowered teams
- Build quality in: continuous integration, test automation, test early

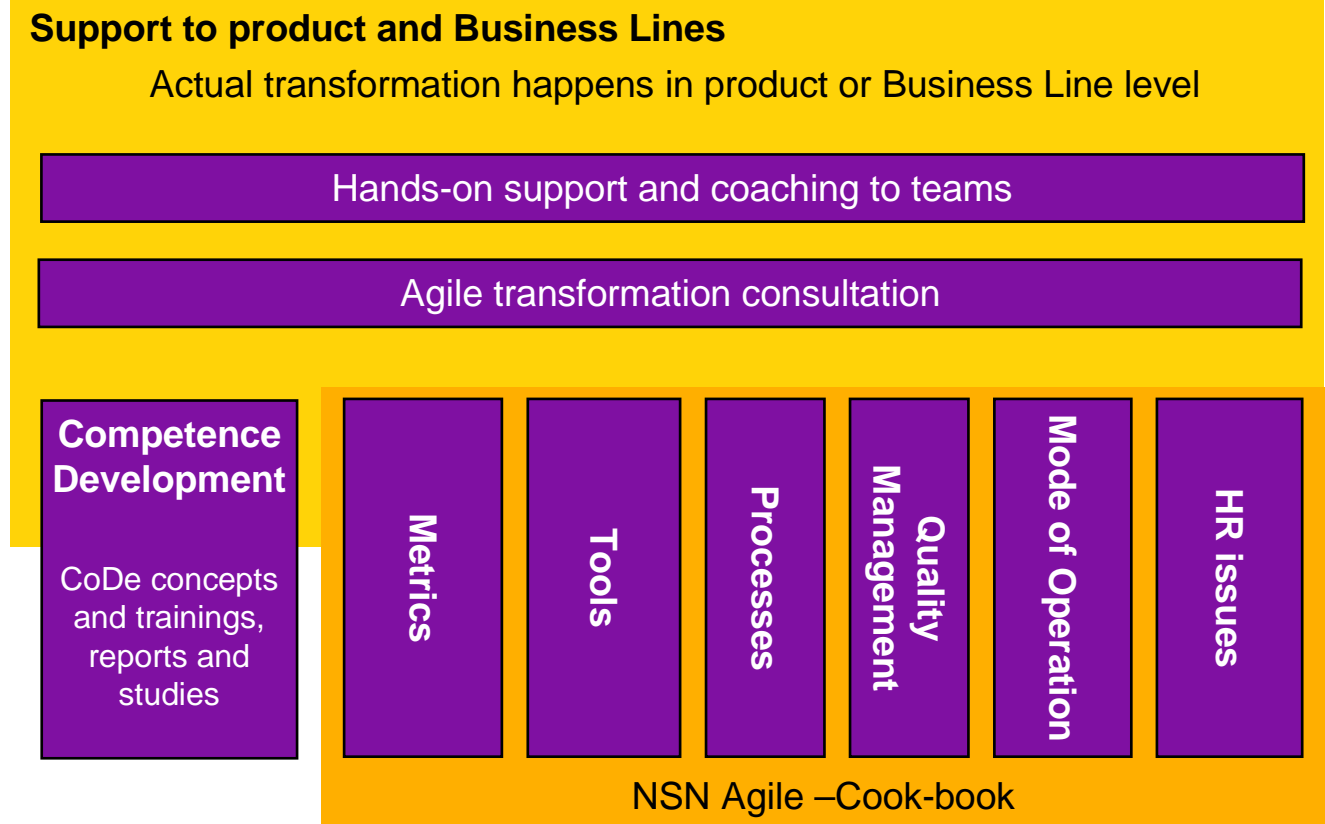
Currently in Nokia Siemens Networks

- About $\frac{1}{4}$ of NSN Product development is either piloting or using Agile development practices
- Products range from:

– Environments:	Java		Traditional
– Size:	10		500
– Development sites:	1		5
– Product phase:	New		Legacy
- The largest product which is slowly moving to agile development is about 500 people, legacy product, embedded SW, multi-site and collaborated
- Several training and coaching solutions

Agile transformation in NSN

- Each Business Unit or Product (Line) decides if and when to do the transformation
 - No enforcement, let the teams choose what practices to use!
- Centralized support for Agile and Lean development



Agile development in NSN

- Don't do agile, be agile
 - It's all about mindset, values and principles
- There is no single Agile method or practice that would be sufficient as such, so we combine Agile practices to NSN processes
- Teams combine different Agile practices and take gradually more new practices into use
- **The two “musts” (a.k.a. where to start)**
 - **Short iterations** -> **Quick feedback**
 - **Retrospectives** -> **Inspect and adapt!**

Core Agile practices, which emerged in NSN

- Time-boxed short iterations
- Prioritized product backlog
- Continuous integration
- Self-organized, cross-functional feature teams
- Inspect and adapt

- Core set of practices for agile transformation
 - the basics in place
 - create the framework for continuous improvement towards increased agility and flexibility.
- These practices alone are not enough!

Widely used Agile methods and practices

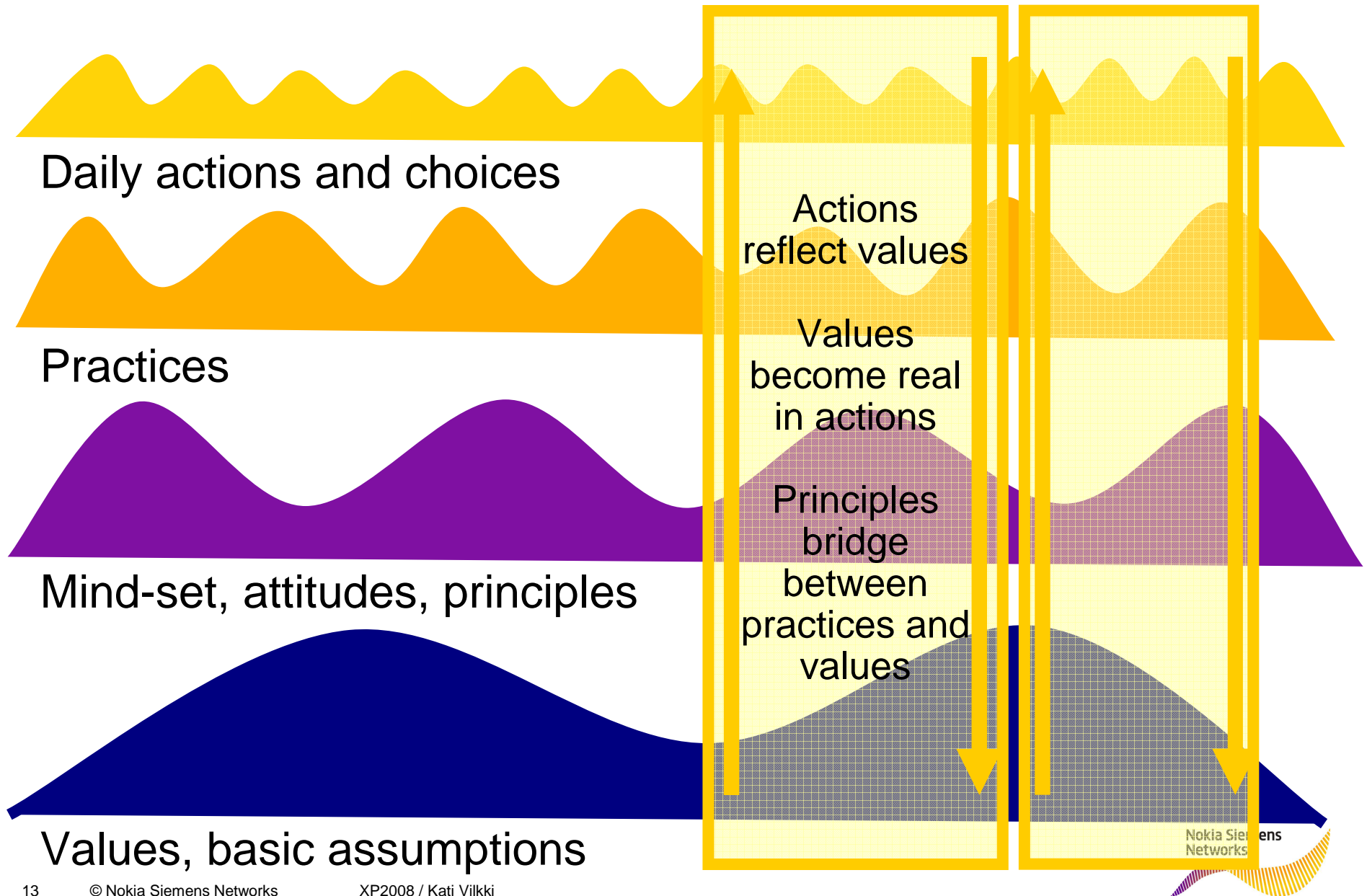
- Scrum
- Adaptive planning
- Estimation / planning poker
- User stories
- Test Driven Development (TDD)
- Acceptance Test Driven Development (A-TDD)
- Re-factoring
- Pair programming / pair design
- Agile modeling
-

Organizational changes process

Change process

- Change process has to reflect the desired result
- Those parts in organizational culture, which really need to be changed, are the ones, which will stop the change process
- Different enough, similar enough
- Full of paradoxes!

Different levels and cycles in sync



Agile values and principles applied to the change process

- Get competent people, build team and interaction – and learn
- Start next Monday; do something in practice, not on paper
- Create relationships build on trust, and cooperation
- Continuous look where you are and adjust the change process

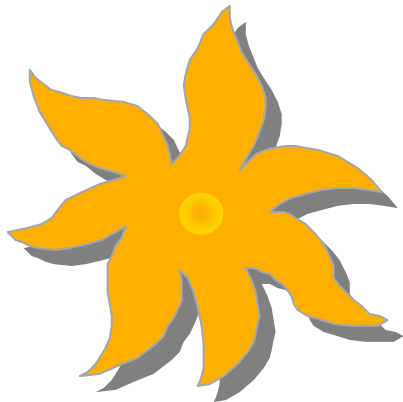
- The best processes emerge from self-organizing cross-functional team
- Work in short cycles, create a lot of learning opportunities and get results
- Simplicity – **the art of maximizing the amount of work not done** – is essential.

Similar enough, different enough

- Organizational culture needs to change in any big transformation and it also has a huge impact on how to drive changes.
- The key messages of the change and the way of delivering them have to be different enough and similar enough to the existing culture.
 - If the message is too distant from the current reality, people will perceive it as unrealistic and do not trust the change.
 - On the other hand, there has to be real change and the message has to reflect that.
- **DYNAMIC BALANCE!**

Organizations are the people and their interaction

- Organizations are complex adaptive systems of **people**
- Global patterns emerge from local interactions
 - Organic growth
 - Continuous interplay of plans and desires



Global patterns
emerge from local
interactions

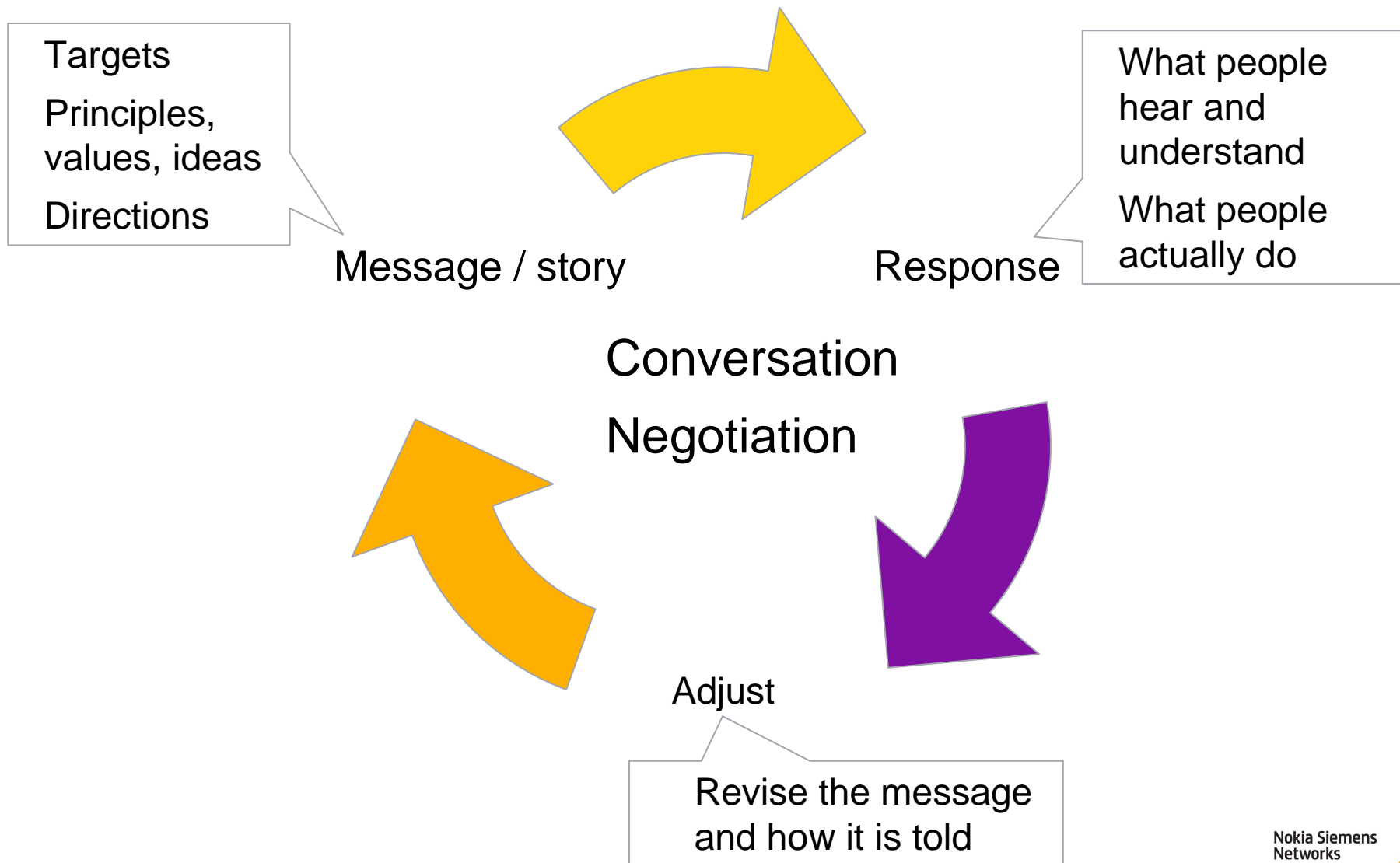
Change happens

Change process and transformation is not predictable, repeatable process

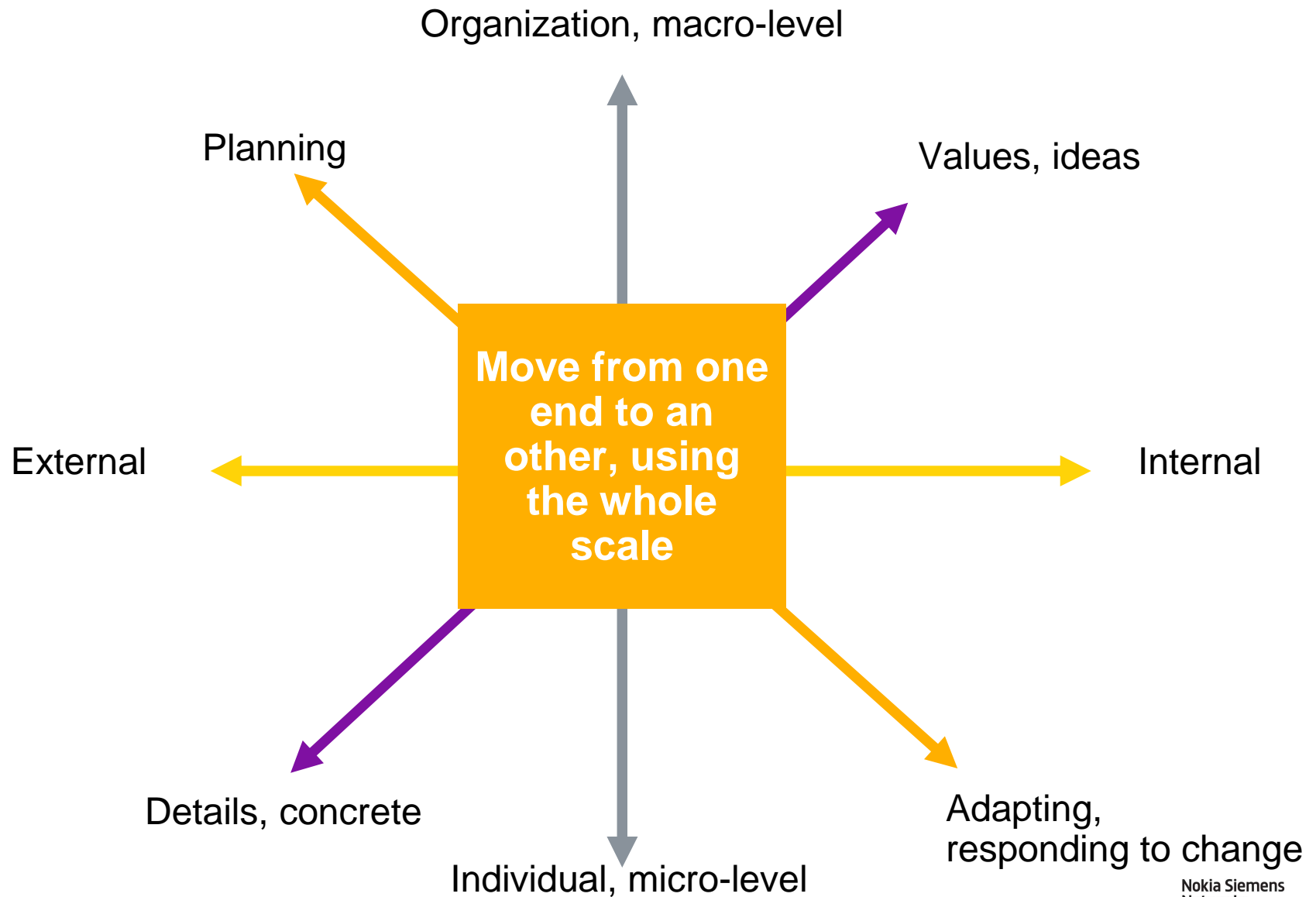
You can't control change, but you can engage in change



Change process is about creating interaction



Dimensions of change

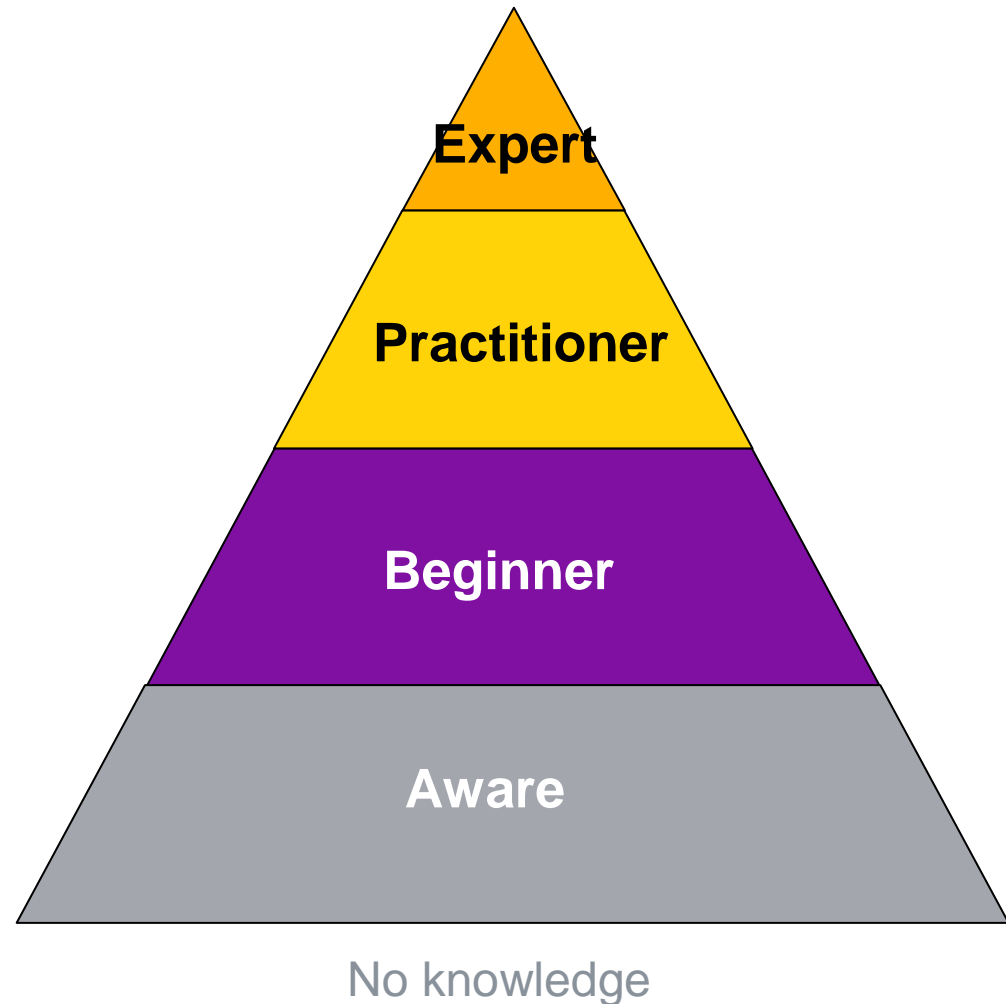


Learning process

Transformation is always a learning process.

The whole organization needs to learn.

The change will proceed faster after the critical mass has been reached.



**Barely enough clarity
within confusion**

What do we have to learn as an organization?

**How to do Agile
and Lean
development?**

Practices, tools

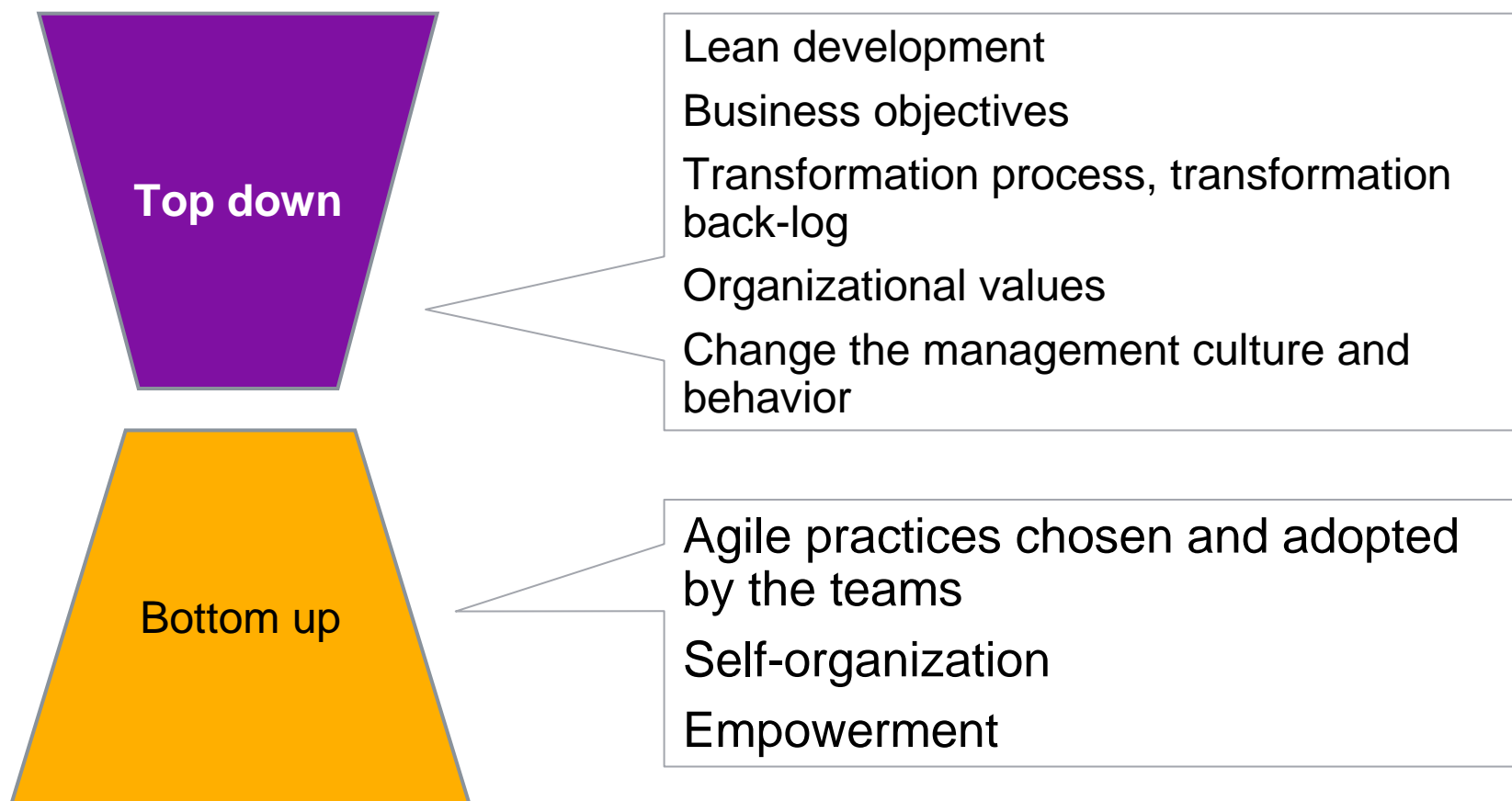
**What is Agile and
Lean development?**

Principles, values

How to lead

- The transformation
- Agile & Lean development

Bottom-up and top-down

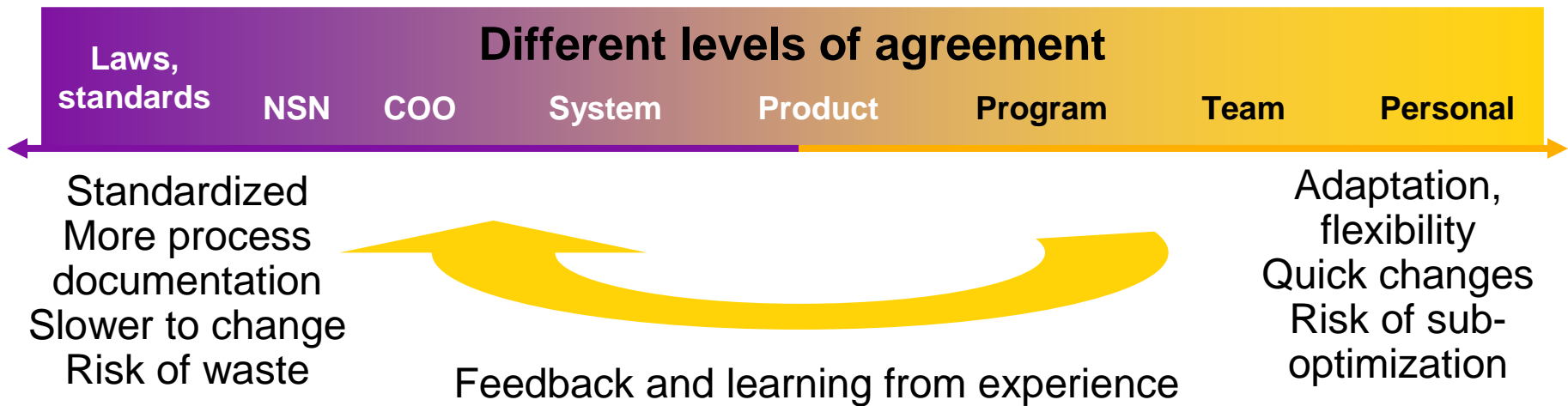


- Some things in the agile transformation should be driven bottom-up and some things require top-down approach.
- It's a big challenge for management to support the change sufficiently and not to over-drive it.

Empowered people
working in
a self-organized team
for a common goal

Standard processes and self-organizing, empowered teams combined successfully

Common direction



Barely sufficient process documentation
Minimum amount of standard processes!

Paradoxes of Agile transformation (1)

- Similar enough and different enough
- Global patterns emerge from local interactions
- You can't control change, but you can engage in it
- Barely enough clarity within confusion
- Bottom-up and top-down
- Common processes and teams owning their own processes

Some more paradoxes of Agile transformation (2)

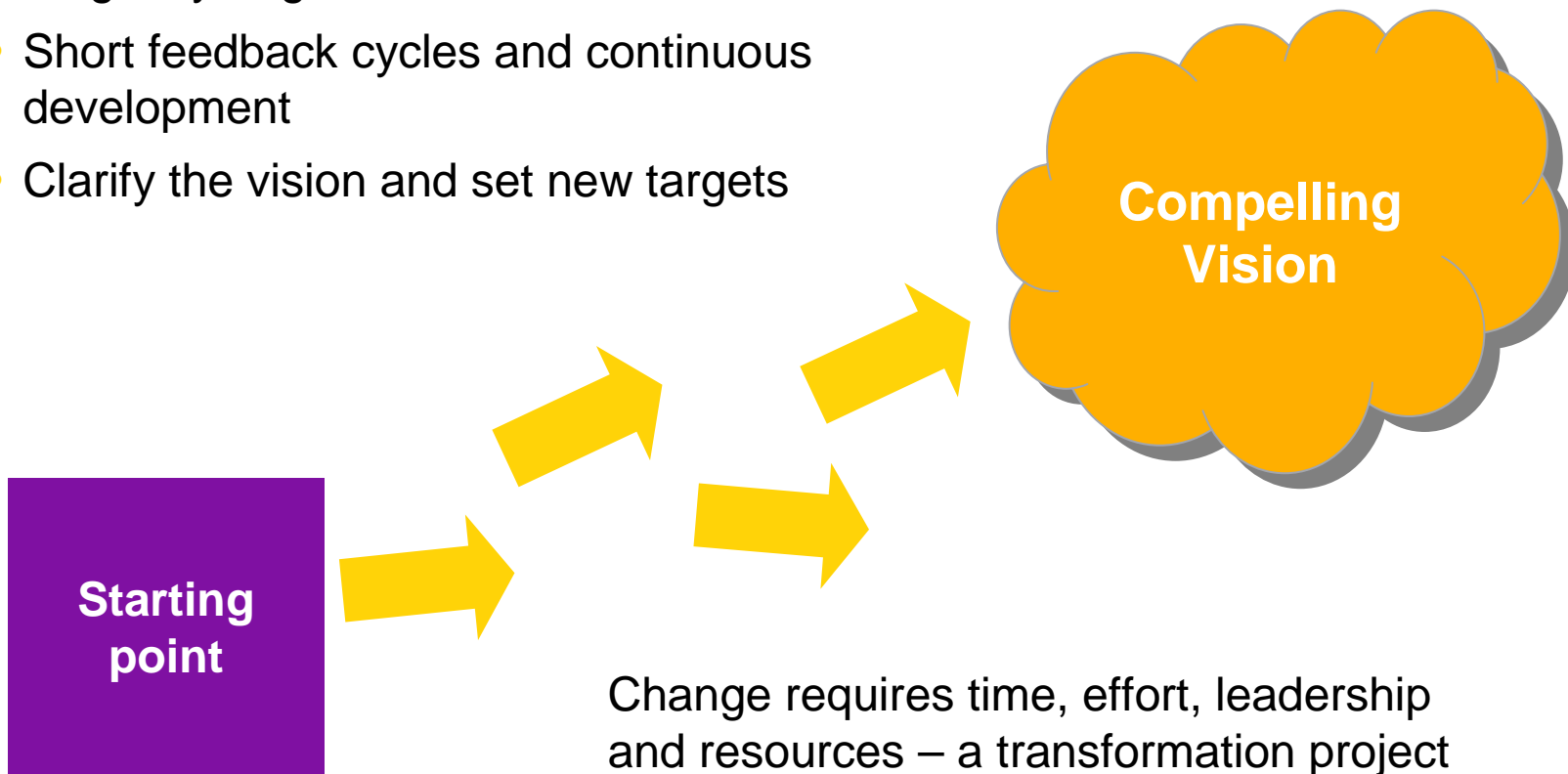
- Respect people's experience and change the development paradigm
- Big change happens in small steps
- Simple and difficult
- Agility through inflexibility
- Balance values, principles, ideas and concrete steps
- Planned and responsive change process

Transition process to Agile

An Agile and Iterative transition process

It's about starting the transformation and learning as you go!

- Short feedback cycles and continuous development
- Clarify the vision and set new targets



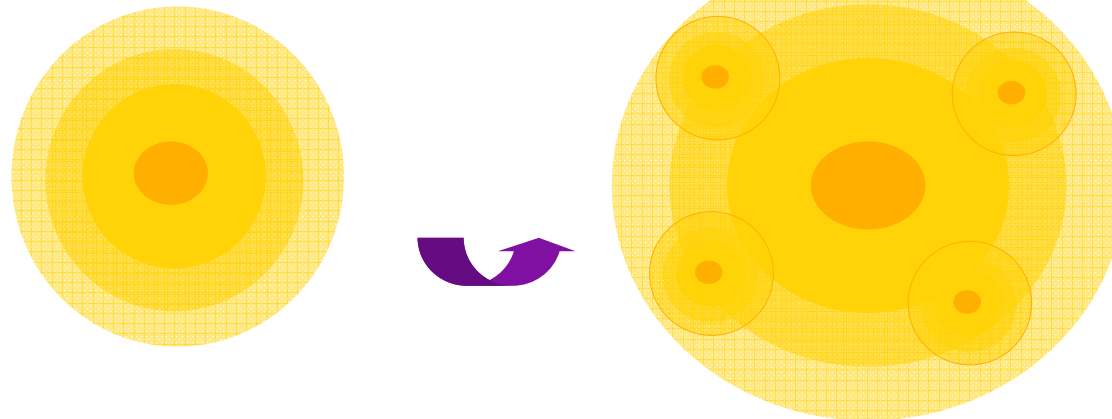
Change progresses in steps

Change requires learning

Learning takes time and effort

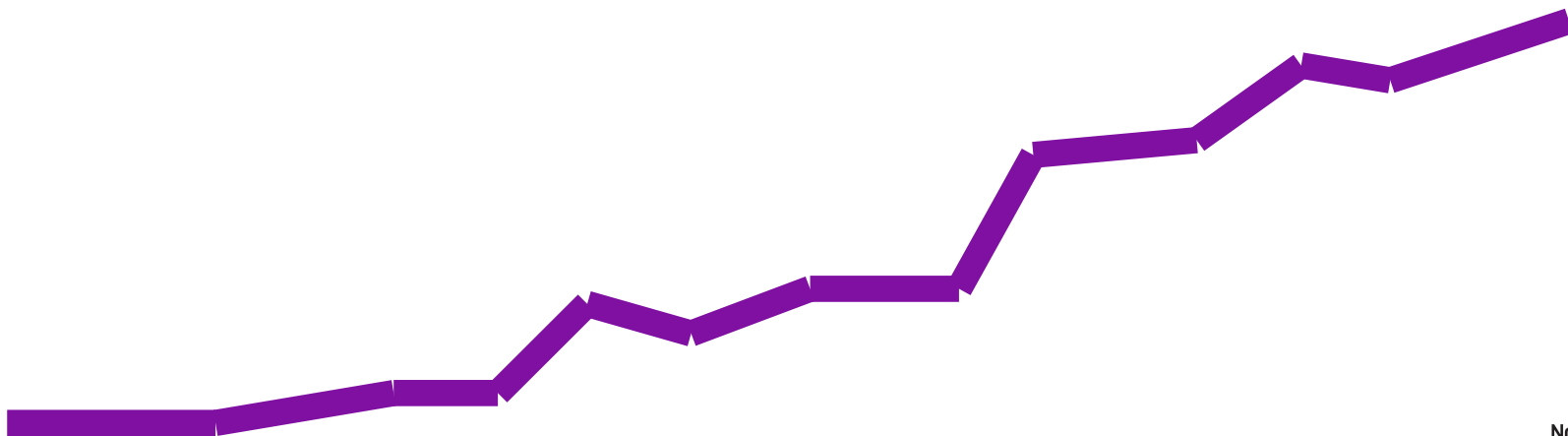
Change is "done" only after

- All stakeholders have "chosen" it
- All stakeholders are committed to promoting it
- It is visible in action



In every major change there are several changes

- Flow of change
 - Things happen when the time is ripe
- Stagnation and progress alternate
 - Do not get discouraged



You know you are not doing the agile transformation if you



NSN test for
agile
adaptation

- Plan, do a feasibility study, then plan some more
- Start by creating the agile process and choosing tools
- Dictate, do not leave any room for teams to choose
- Combine with other unpleasant changes
- Set targets for others, but do not change anything yourself
- Set strict boundaries
 - We want to do this agile thing, but we can't change anything
- Don't invest in training and coaching
- Keep your old metrics and target setting practices

Success factors

- **No enforcement:** let the teams choose
- **Start doing** and learning
- Provide the **support** for teams when they need
- Use good external **consultants – bring knowledge in**
- A lot of **open information**
- Link people together, build **communities**
- Focus on both **technical** and **people/organizational** issues



**THANK
YOU!**