Nokia LTE Base Station with LeSS Huge

Bas and Tero

2018 LeSS Conference New York

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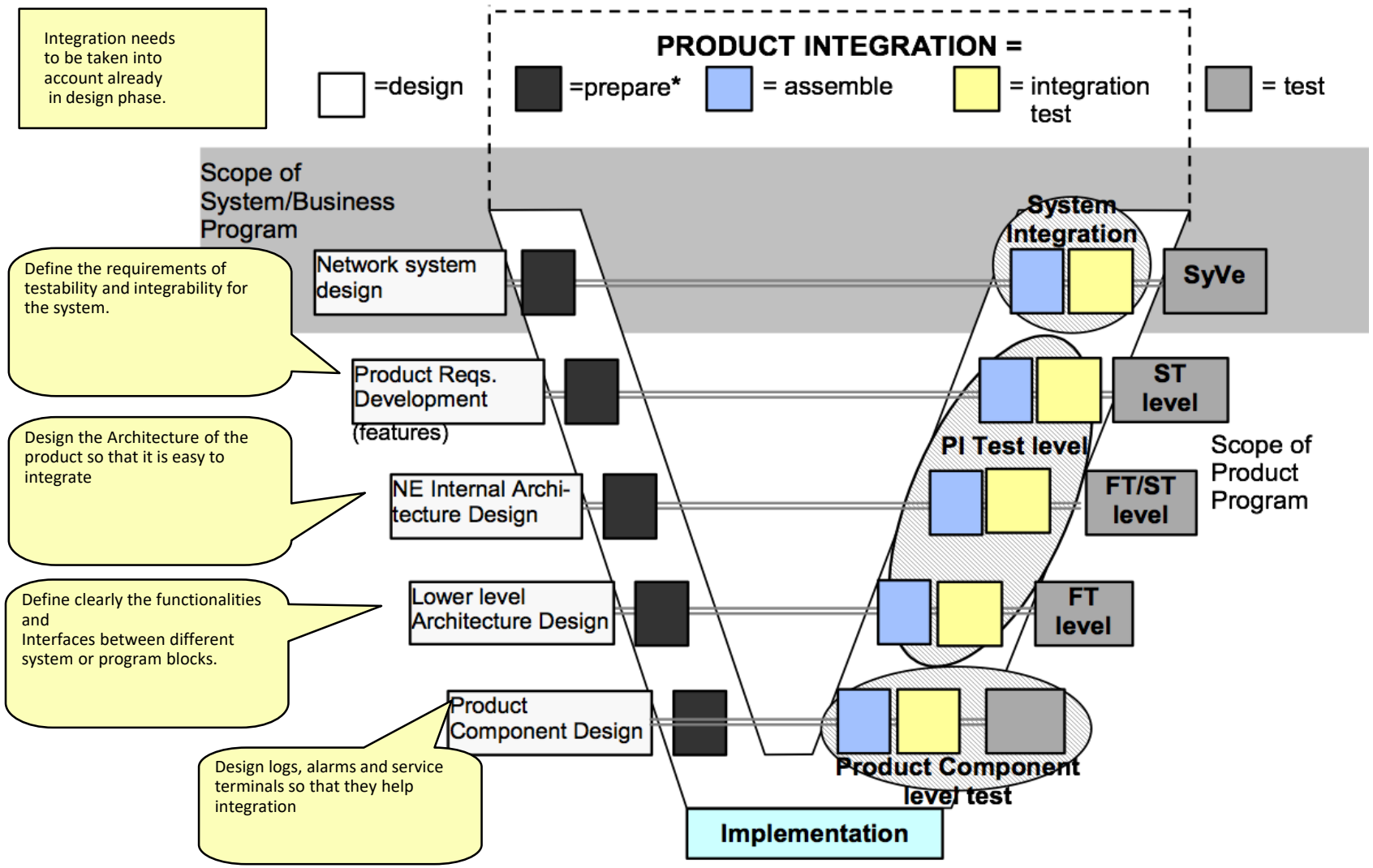
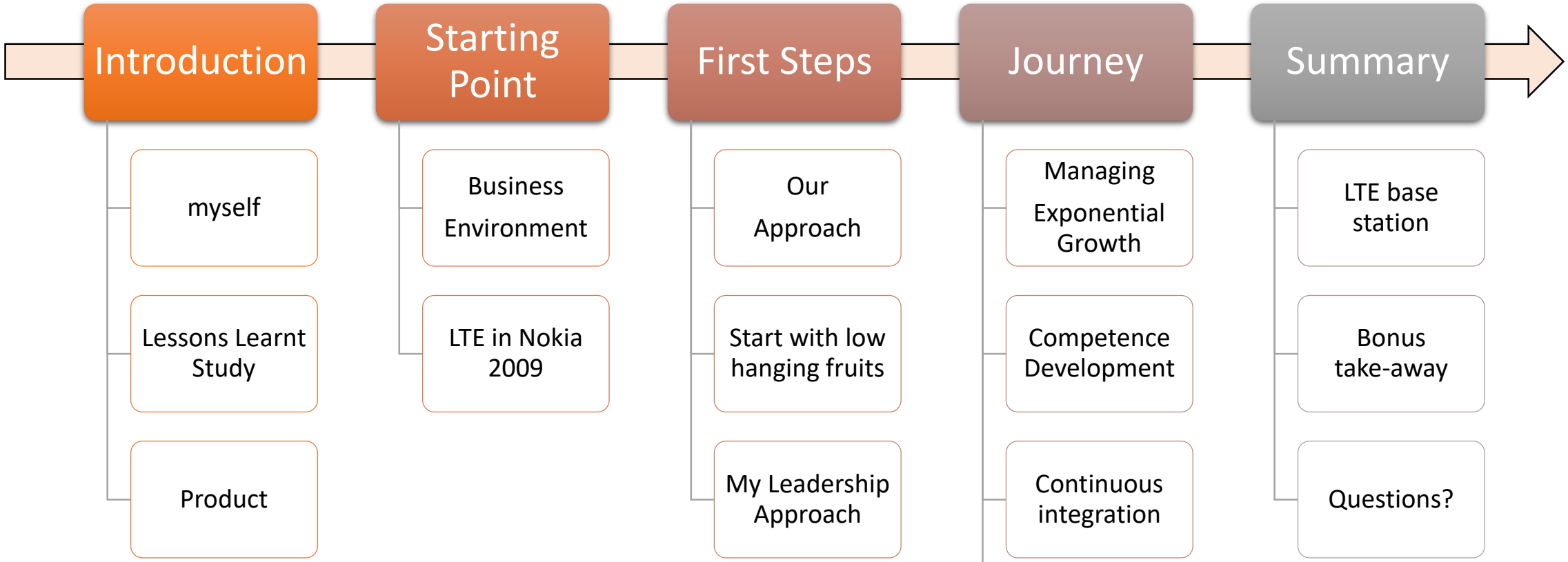
TAURANT

Levels of integration





Disclaimer:

1) opinions own – not from Nokia

2) based on own memory => might have inaccuracies

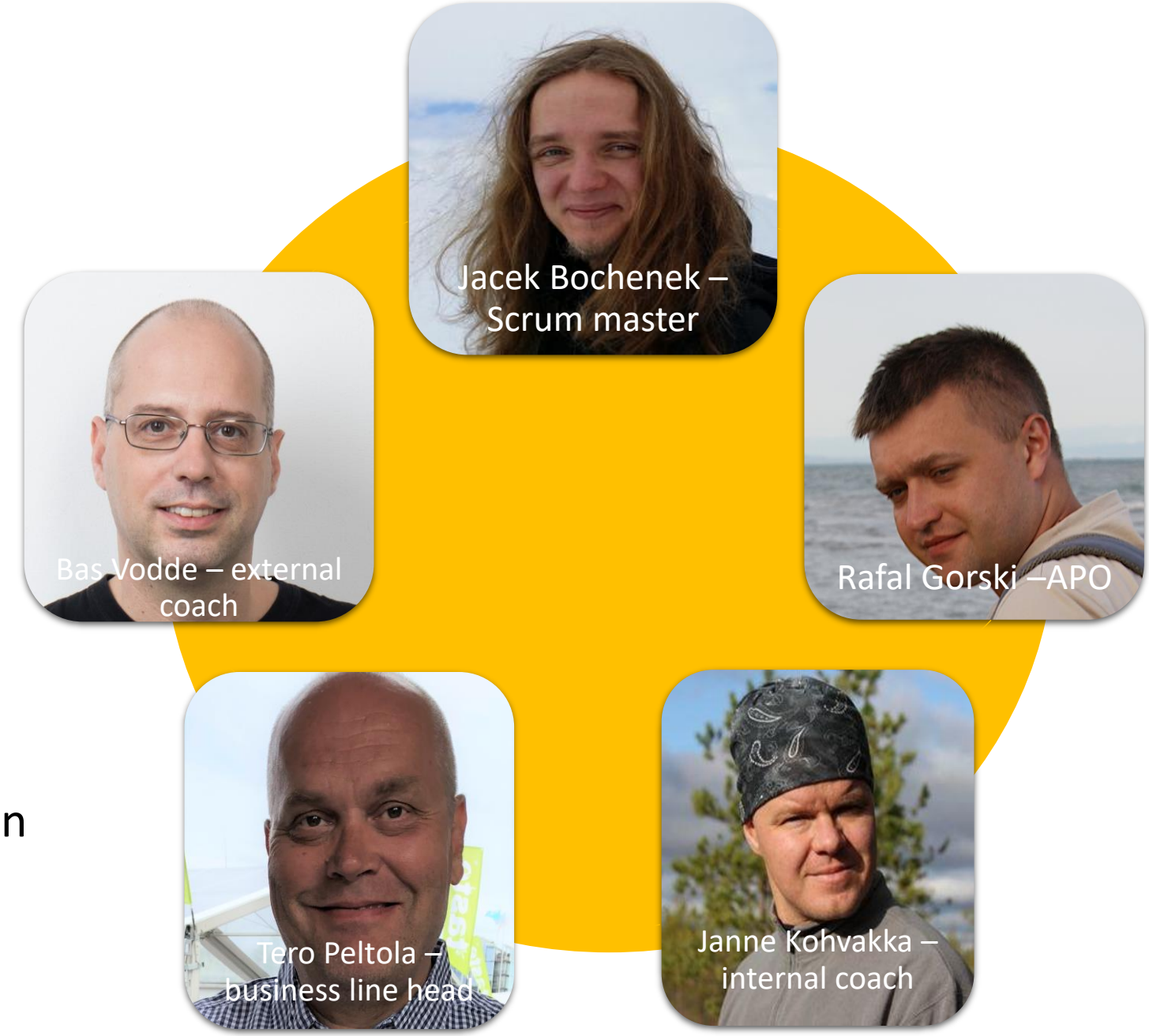
Storyline – Manager's view on adoption

Introduction

Tero Peltola

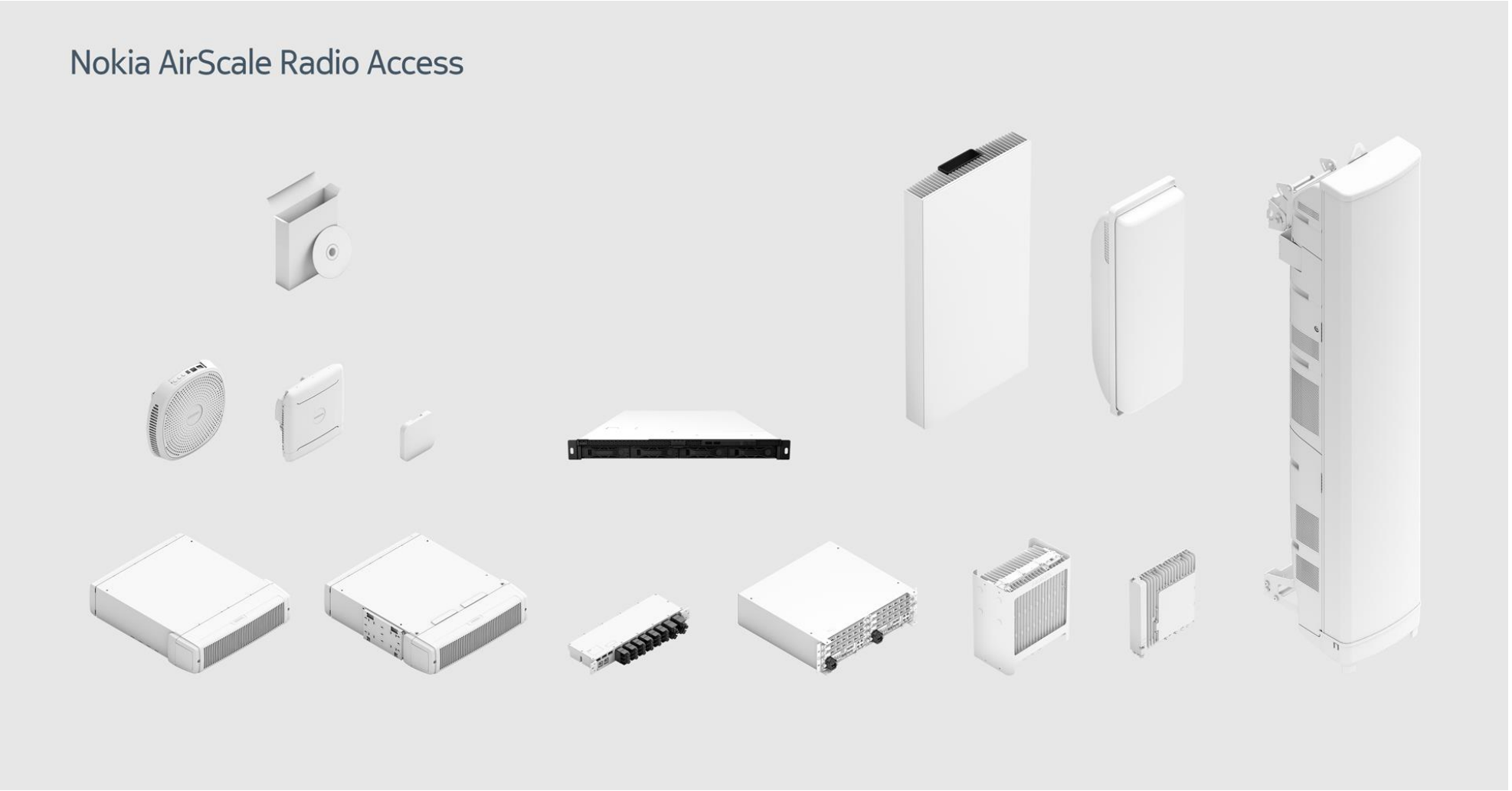
- Helsinki, Finland
- 30 years' experience at Nokia
  - SW developer – operating systems
  - R&D management
  - Platform organization: agile introduction
  - LTE - head of R&D
  - LTE - head of business line
- Currently entrepreneur at mosahybrid
  - Working for fun
  - Consulting interesting projects

Nokia LTE Lessons learnt study



The material will be published in LeSS Case Studies soon!

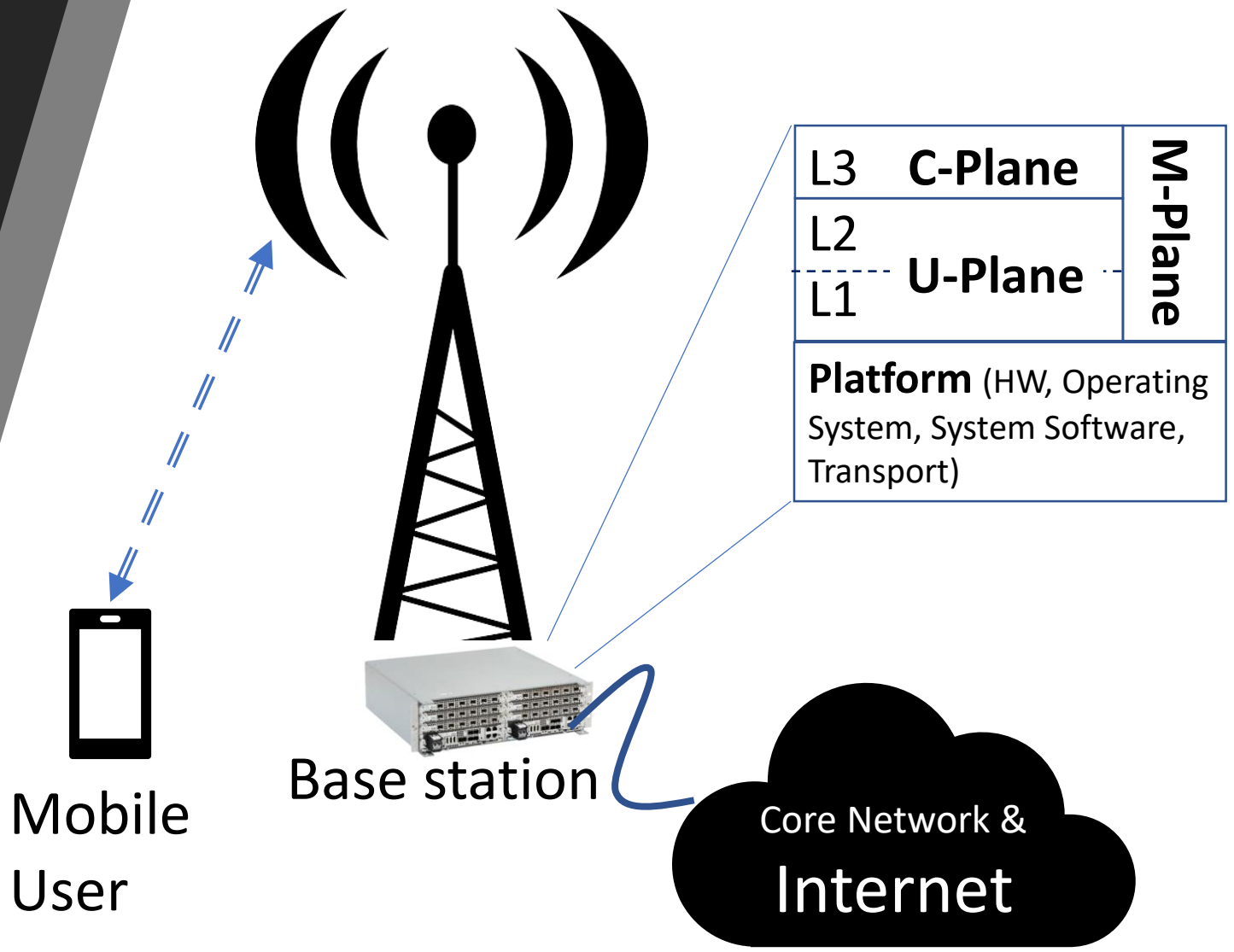
Product – Nokia LTE Basestation



Source:
www.nokia.com

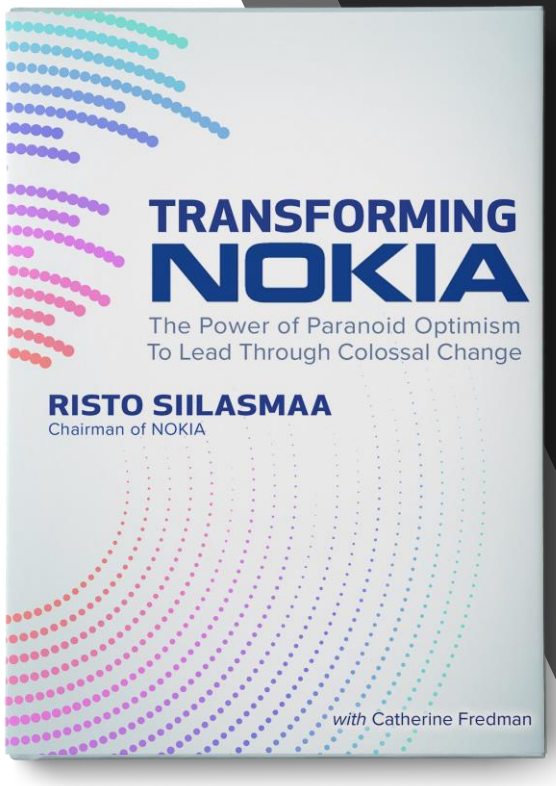
Product – LTE Base Station

- Key product for telecom operators
- Real time embedded system
- Both HW and SW
- Separated platform and application
- Application >10MLOC



Starting Point

Nokia Business Environment



- Typical telecom business setup
  - Primary customer interface via Customer Operations
  - Product organization for
    - product management and
    - R&D
- Nokia in the middle of the enormous transformation
  - Fighting for survival during Devices exit
  - Continuous organization integrations
    - Nokia with Siemens, Motorola, Panasonic Networks, Alcatel Lucent

LTE in Nokia 2009

LTE business

- The next big thing in telecom => Fierce competition
- Not yet commercial use – 3 deals done
- Top management willingness to invest in LTE

Organizational challenges

- Silo functional organization
- Complex project management structures
- Worst case 14 hand offs during development
- Long releases, long stabilization time
- Integrating teams from Siemens and Nokia

Technical challenges

- Inherited problems from earlier generations
- Code already a big mess
- No unit tests or low test automation level
- No continuous integration
- Many branches

First Steps

Our Approach

Stepwise …and long term

- Mandatory to get releases to customers constantly
- Process or way of working – is not the purpose or goal
- Teams are capable to take only limited changes at time

Use Agile and LeSS

- Customer-centric
- Flexibility – scope changes
- Time-to-market
- Efficiency
- Continuous Improvement

Kicking off with low hanging fruits

Need

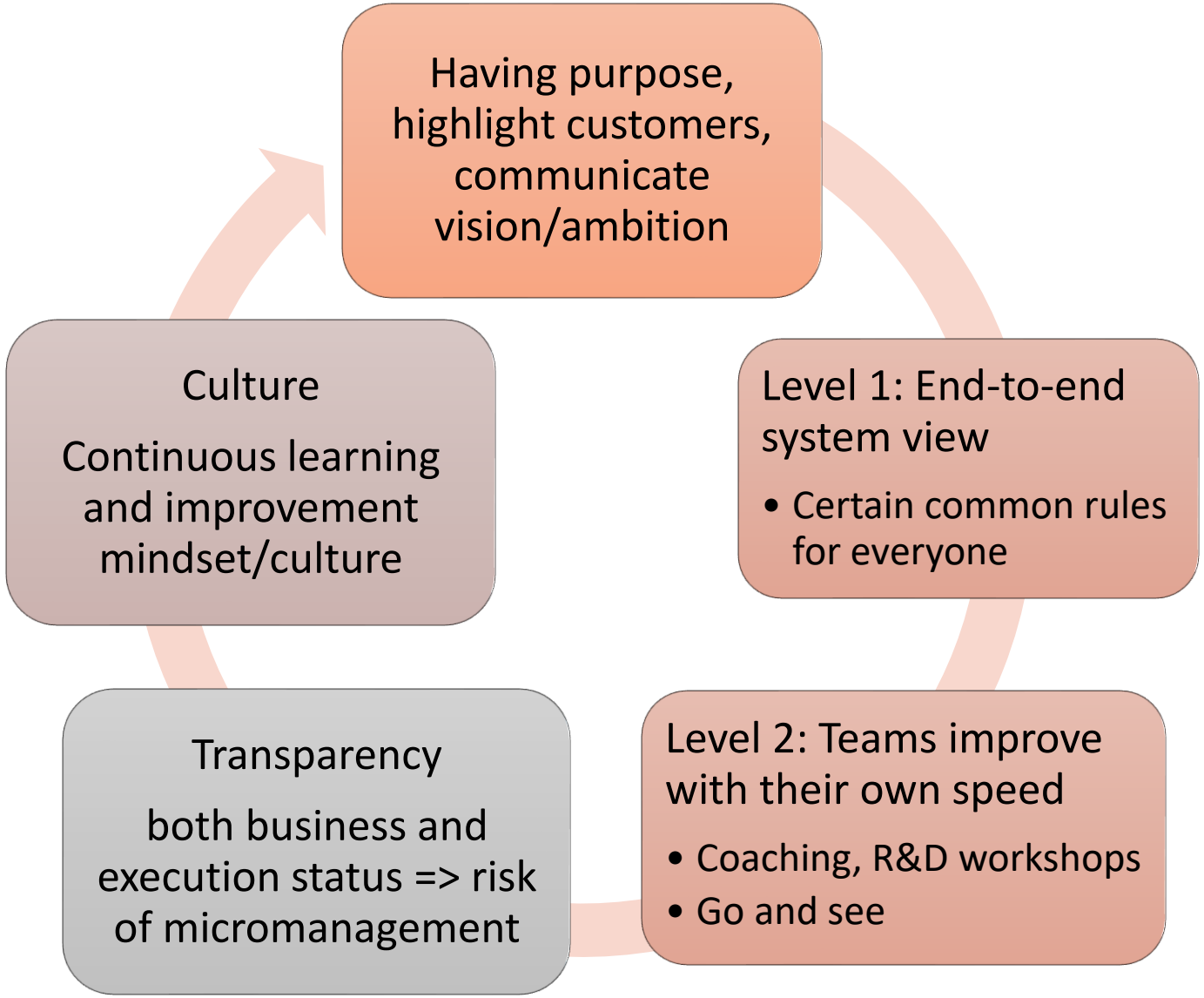
Both for business and team:

1. Short term solution
2. Long term improvements plan&ambition

Solution

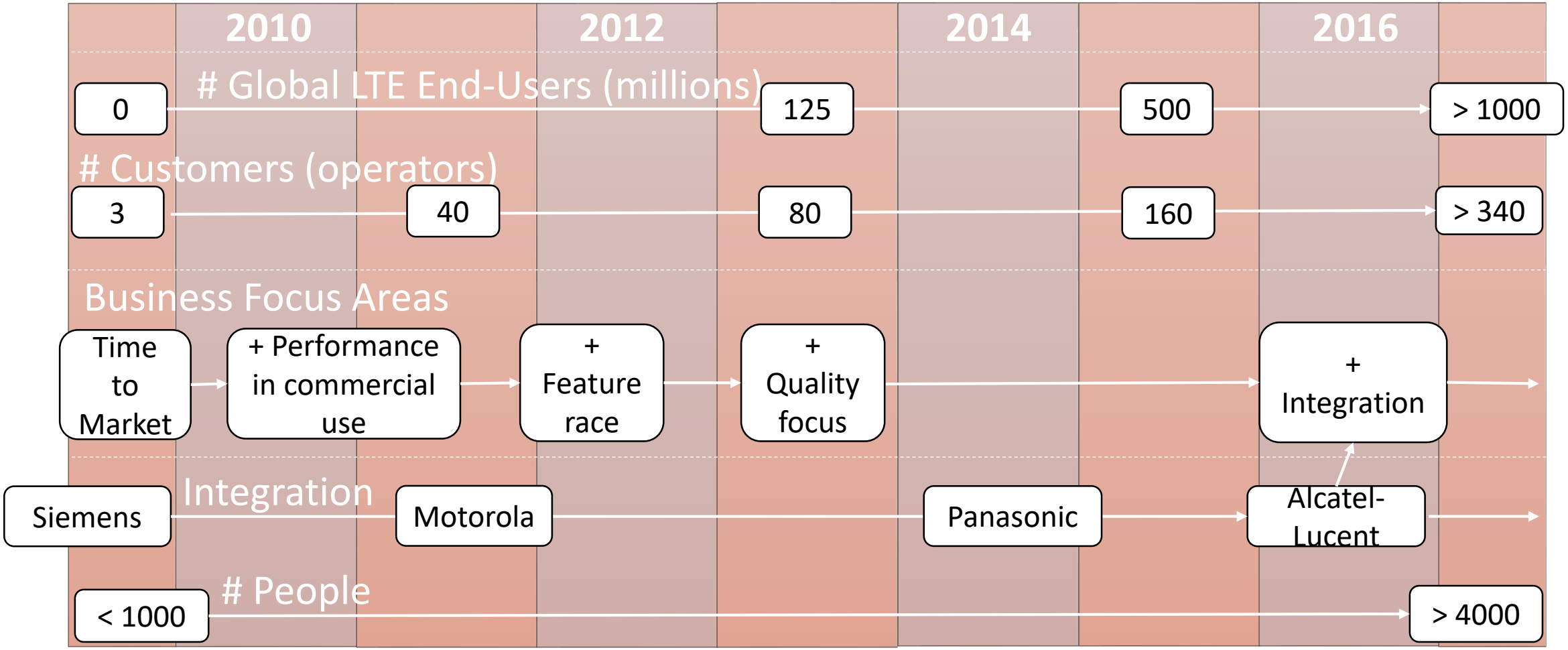
- Creating one team with one mission
- Getting customer and their needs visible to all
- Breaking silos - Having e2e system thinking
  - Optimizing where it really matters
  - Phased approach
- Creating monthly rhythm
  - For planning, execution and learning

My way in Leading LeSS Huge Organization

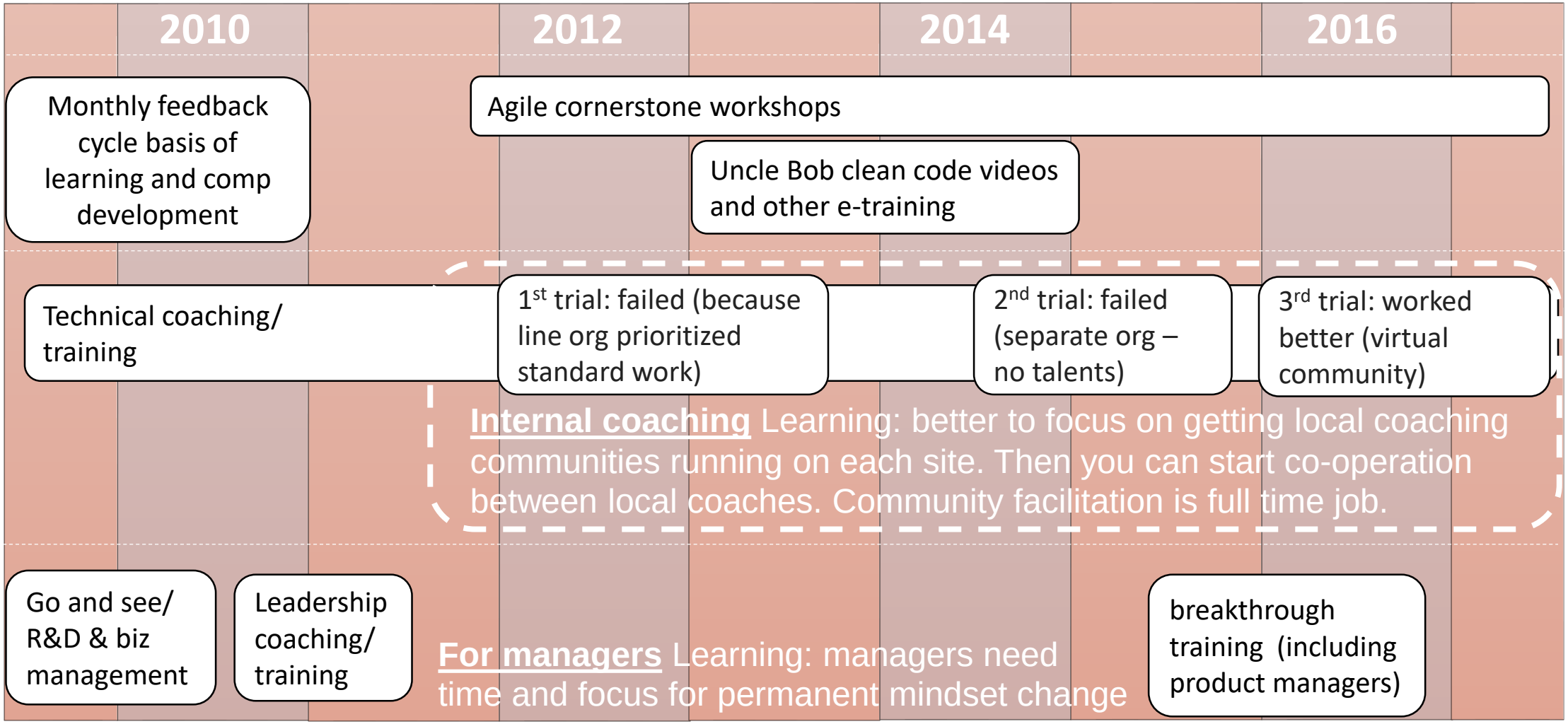


Journey

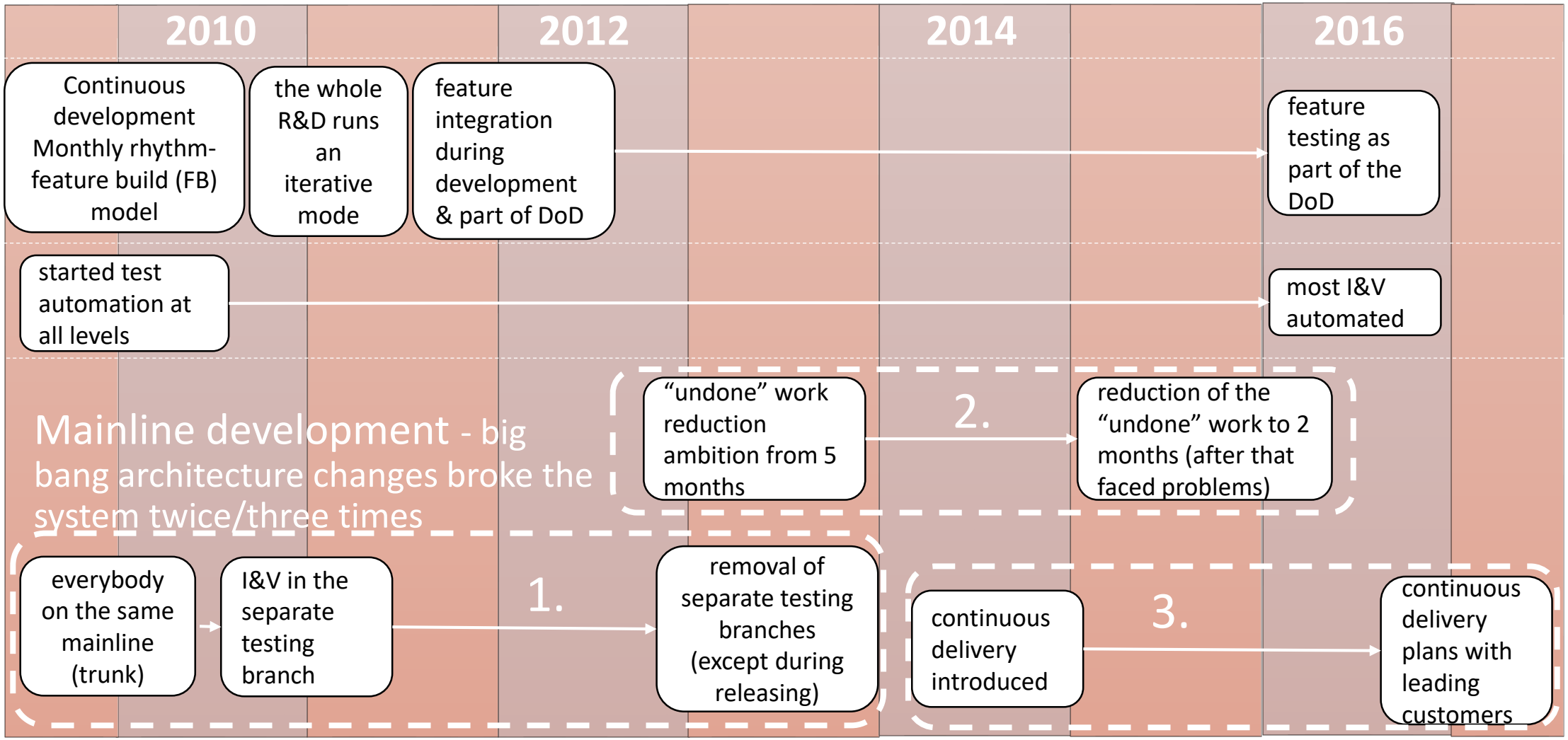
Managing exponential growth in Business



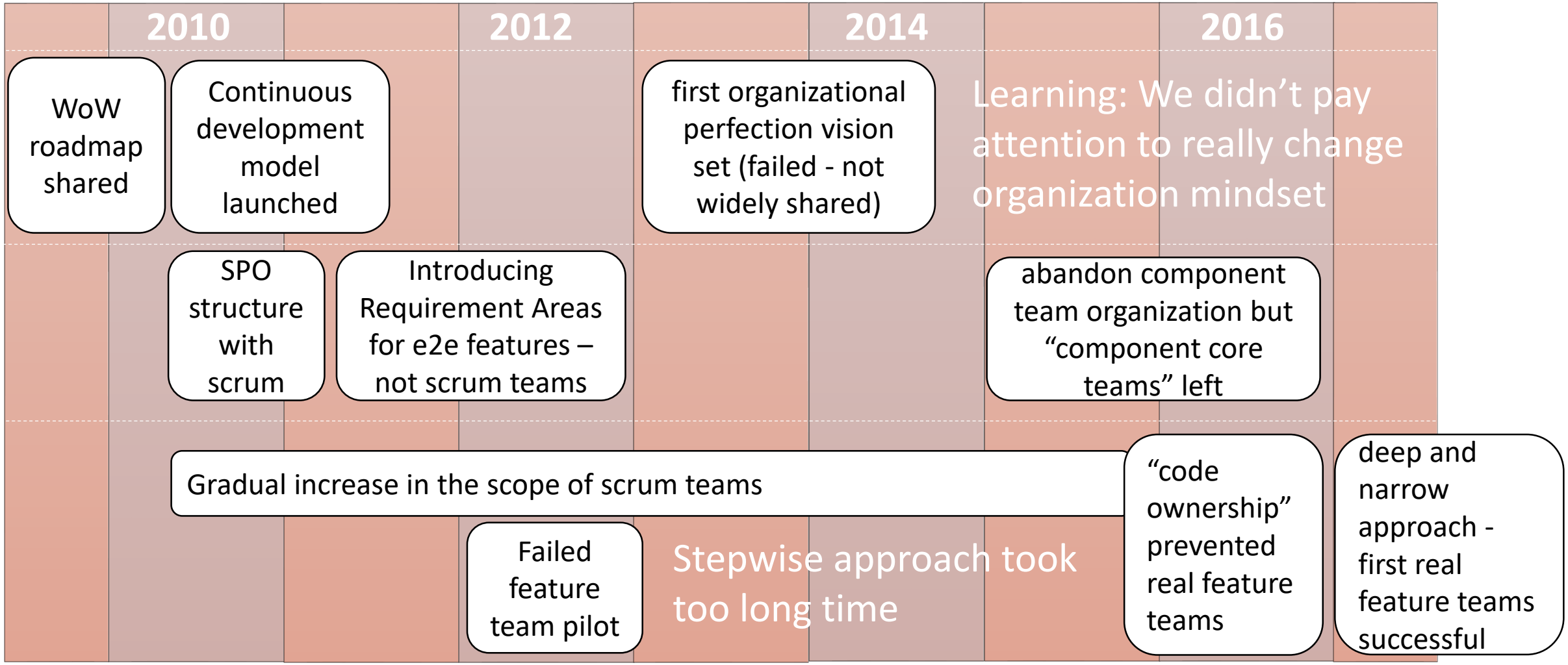
Investment in Competence Development pays back



Continuous Integration was a success – and could have been better



Way-of-Working (WoW) improvements are slow



Summary

Agile adoption enabled us to be successful in LTE business

Adoption journey was not perfect …

… but it was enough for our purpose

Agile - LeSS Huge

Huge achievements, improvements, learnings and fun!

Summary – Nokia LTE basestation

Bonus
…
How to sell your ideas to an old manager like me?

- Even managers can learn,
  - be patient - it takes time
- Understand both short term and long term
- Use the language I understand
- Highlight benefits in business terms: Time to market, Business case, ROI, …
- Don’t play typical “us and them” -game

Questions, comments?

Source: www.nokia.com

Thank you!

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www.mosahybrid.com

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