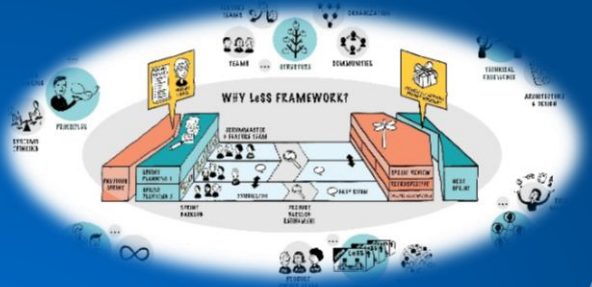
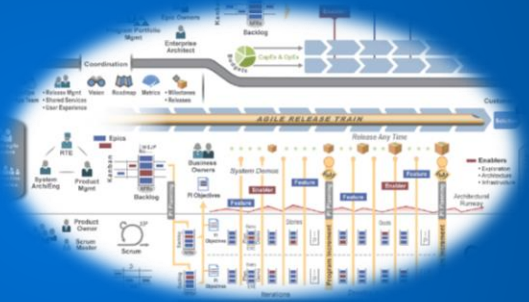
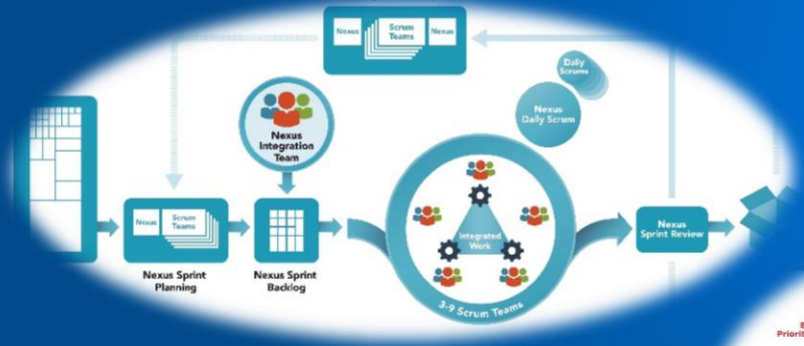
SCALED SCRUM

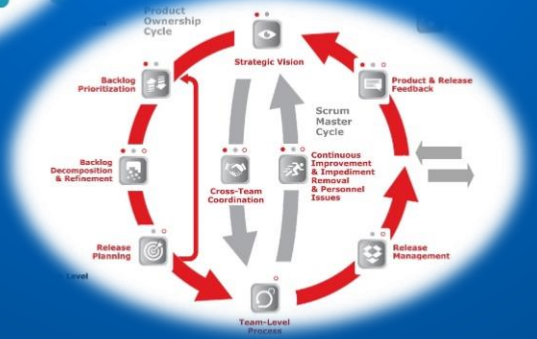
31.05.2016, HFT STUTTGART

DOMINIK MAXIMINI, FLORIAN SAUTER









NOVATEC

AGENDA OF THE DAY

1. Introduction
2. Scrum, what was that again?
3. Play a round of Lego!
4. Approaches to scale scrum
5. Scaling in detail
6. Do it yourself!

NOVATEC

1. INTRODUCTION

Who we are, Pizza, What do you want to learn?

Scrum Master Training

Dominik Maximini

Florian Sauter

Our core competencies
Service portfolio

Our requirement: specialist knowledge and sound consultation, which don't just provide short-term solutions, but offer sustained and strategic benefits.

Successfully mastering interdisciplinary IT projects isn‘t something you learn at the drawing board - there is no substitute for practical experience.

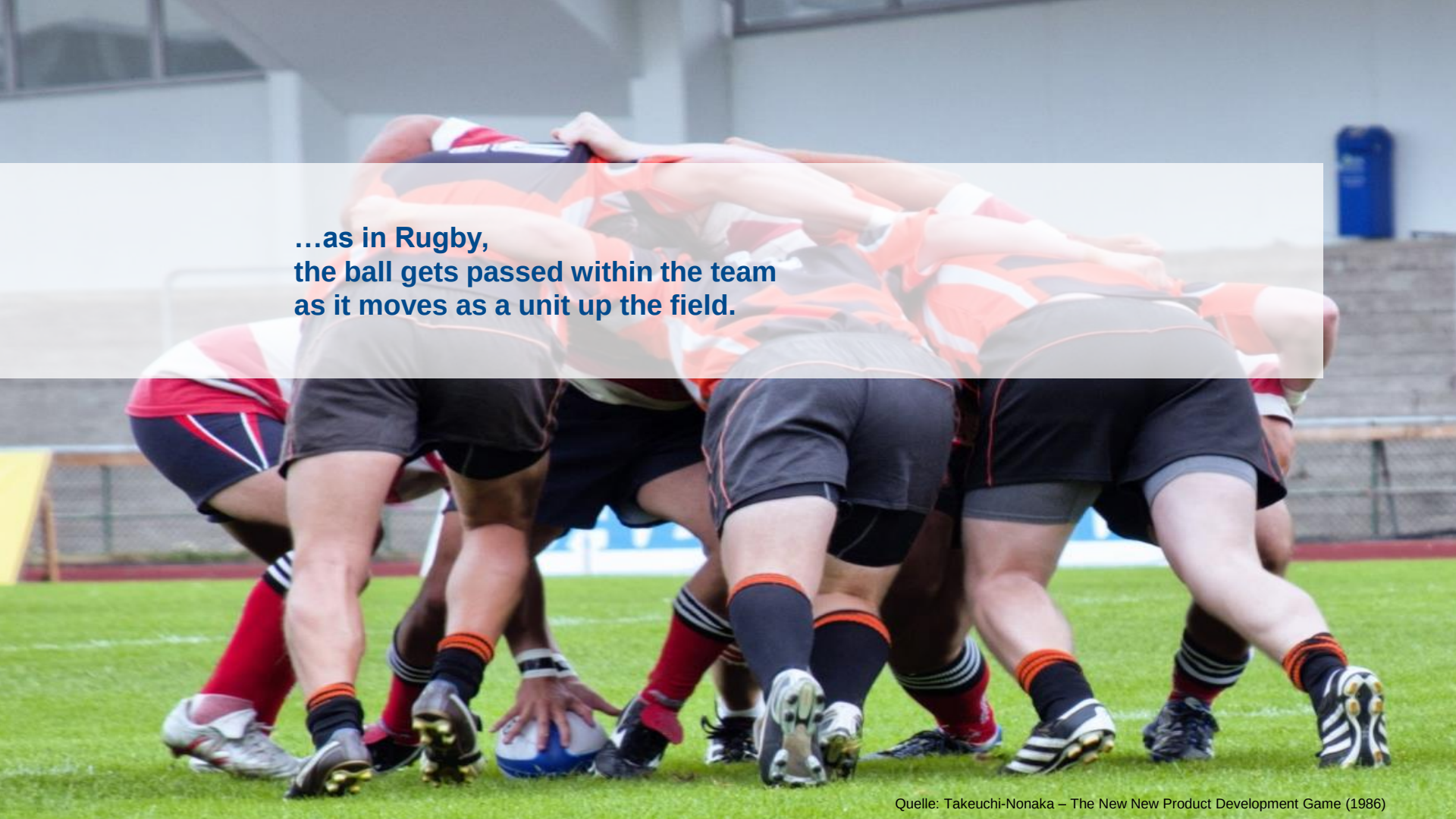
Let us know…

… what do you want to learn today?

… what are the biggest challenges when scaling an agile approach?

2. SCRUM, WHAT WAS THAT AGAIN?

Big Picture, Events, Rollen, Artefakte



…as in Rugby,
the ball gets passed within the team
as it moves as a unit up the field.

Quelle: Takeuchi-Nonaka – The New New Product Development Game (1986)

What is Agility?

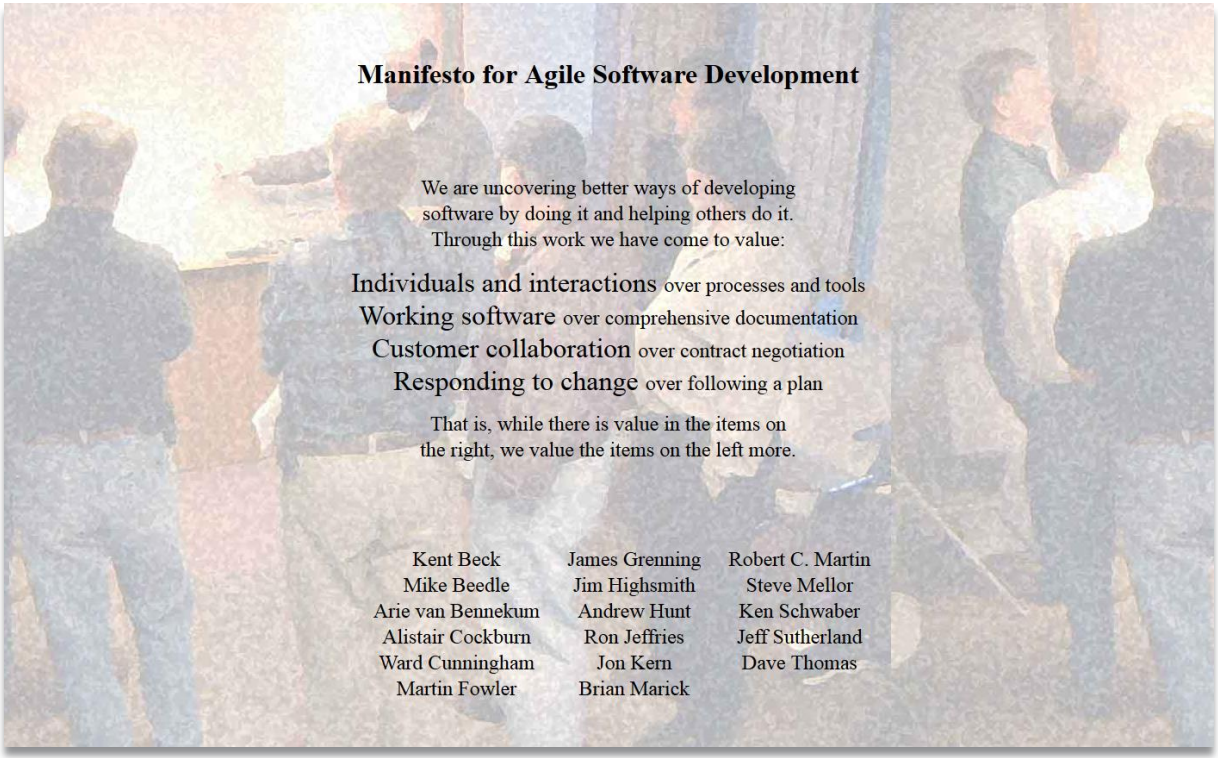
Duden

- demonstrates great mobility
- active and flexible
  - The ability to react rapidly and responsively to changing requirements, while at the same time controlling risk
  - Flexibility, the ability to adapt efficiently and rapidly

„The courage to be honest enough to admit that building software is complex and it can‘t be perfectly planned since requirements change.“ – Ken Schwaber[1]

[1] © Ken Schwaber http://de.slideshare.net/xwarzee/path-to-agility-ken-schwaber

How it began: The Agile Manifesto



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:

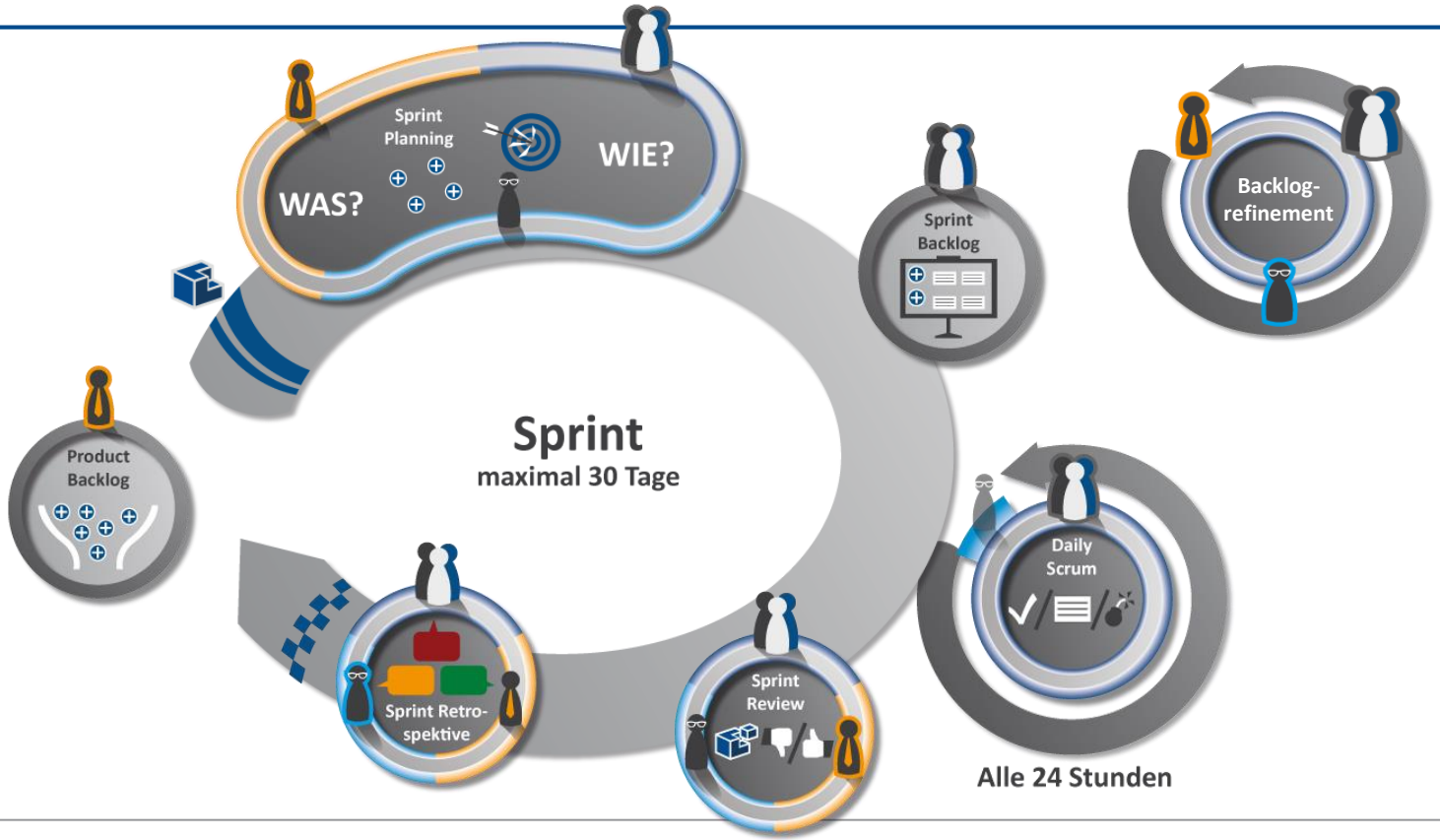
Individuals and interactions over processes and tools
Working software over comprehensive documentation
Customer collaboration over contract negotiation
Responding to change over following a plan

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

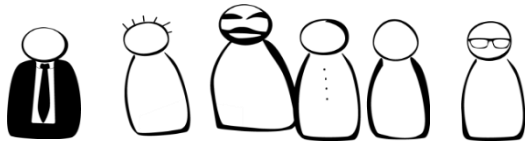
Kent Beck	James Grenning	Robert C. Martin
Mike Beedle	Jim Highsmith	Steve Mellor
Arie van Bennekum	Andrew Hunt	Ken Schwaber
Alistair Cockburn	Ron Jeffries	Jeff Sutherland
Ward Cunningham	Jon Kern	Dave Thomas
Martin Fowler	Brian Marick	

Quelle: http://agilemanifesto.org

The Big Picture

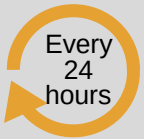
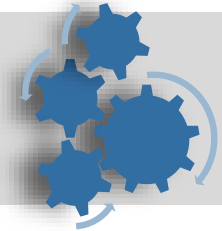
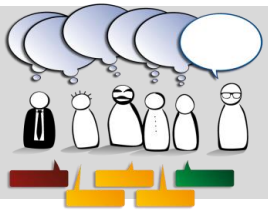
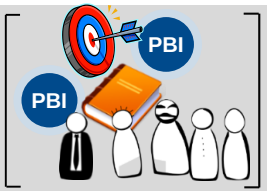


Scrum Events

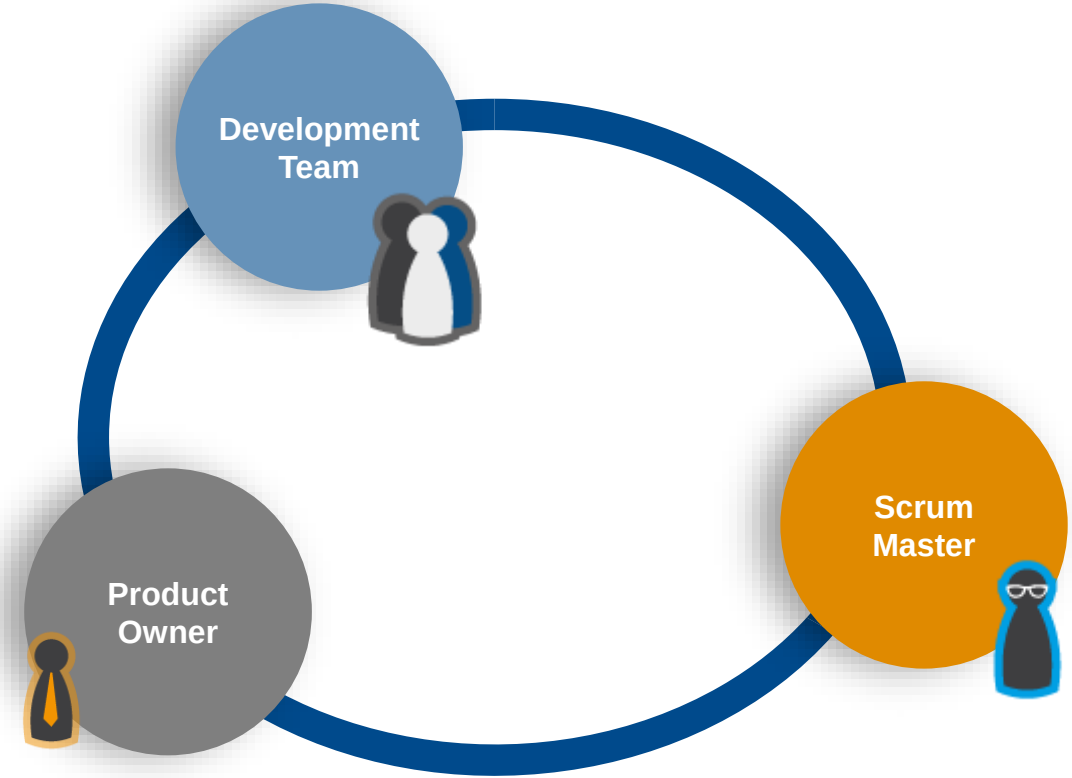


Events...

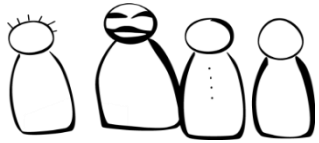
- create regularity and transparency
- minimise the need for further meetings
- are ***timeboxed***
- offer opportunities for inspection and adaptation

Sprint	Sprint Planning	Daily Scrum	Sprint Review	Sprint Retrospective	Refinement Meeting
					

The Scrum Team



The Development Team



Multiple competencies

3 – 9 Team members

Everyone involved

Empowered and self organising

Softskills

Communication, Teamplayer, Responsible, Constructive, Open to new things

Focus on Increment of „Done“ Software

100% Allocated to project

Works iteratively in Sprints

Activities

Everything necessary to turn Product Backlog Items into a releasable Product Increment

Team is accountable

Constant

Collaborates with PO to optimise value

„Developer“

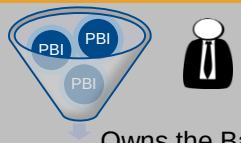
The Product Owner - The business representative

Single individual who optimises Value for the Business

Stakeholder Management

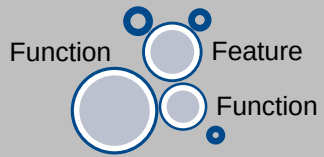
Manages expectations and brings Stakeholer view to the Development Team

Product Backlog



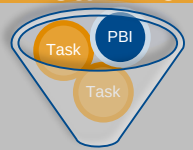
Owns the Backlog and makes sure it is transparent throughout the Organisation

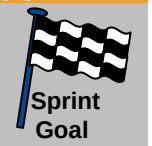
Ensusres the Backlog is clearly expressed at the right level of detail.



Defines the Backlog content and order

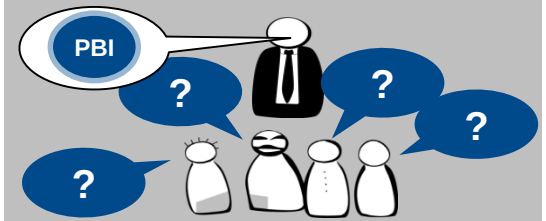
Team Kommunikation





Optimises the Value the Team delivers

Ensures the Development Team understands the Backlog at the right level of detail



The Scrum Master - Function und Activities

1. Ensures Scrum is understood and enacted
2. Personifies the Scrum Values, Rules and Principles
3. Helps the Scrum Team effectively manage the Backlog
4. Servant Leader for the Scrum Team (Mentor, Coach & Facilitator)
5. Enables the Scrum Team to meet its goals through support and eliminatinon of impediments
6. Helps the Scrum Team understand and practice Agility
7. Extends the application of Scrum and Agility in the broader Organisation

Softskills

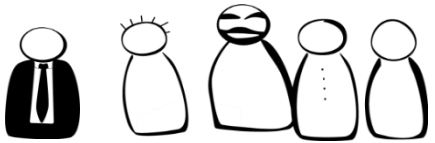
Communication and Facilitation Skills

Personifies the Agile Values

Self confidence

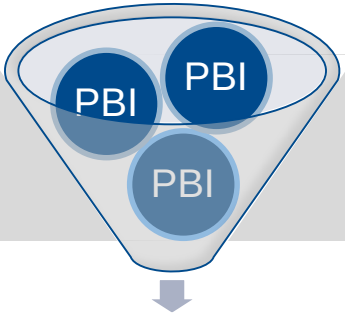
Recognises conflicts and can resolve them

Scrum Artifacts



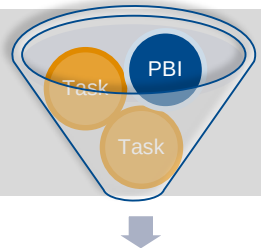
Artifacts

- serve to provide transparency
- provide opportunities for inspection and adaptation



Product Backlog

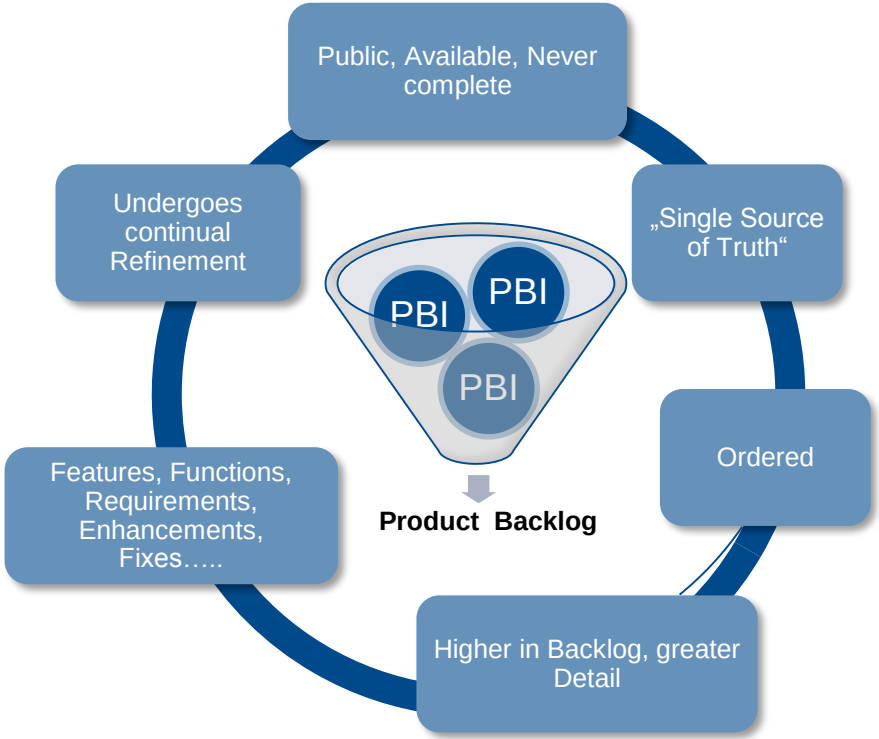
Product Backlog Item



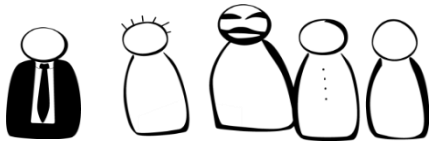
Sprint Backlog

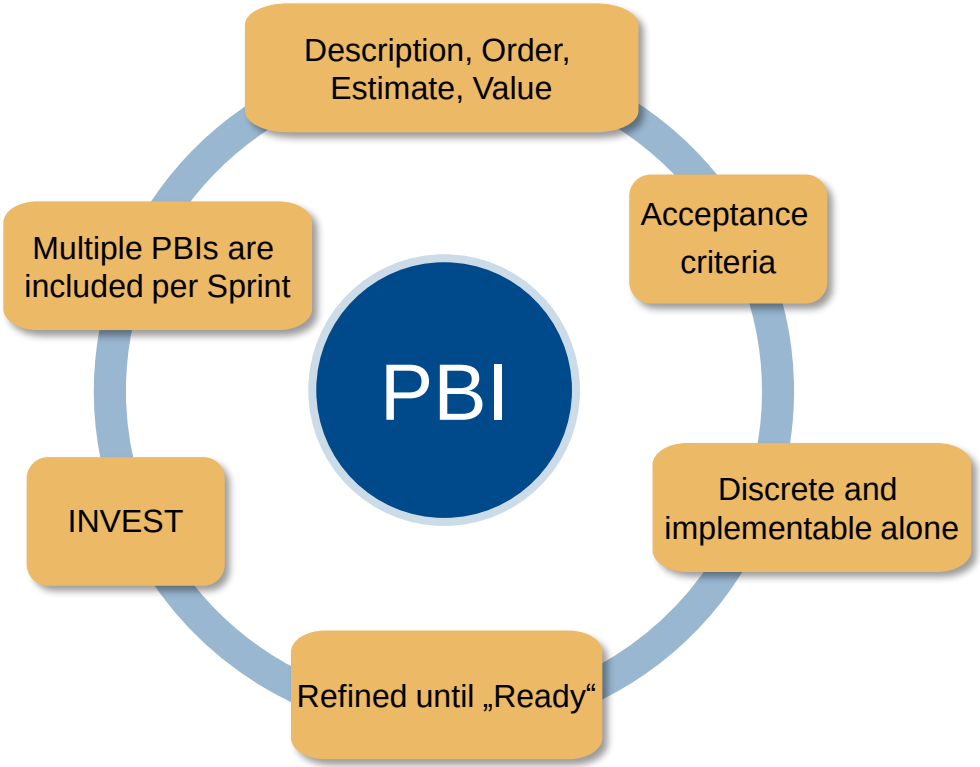
Product Increment

Product Backlog

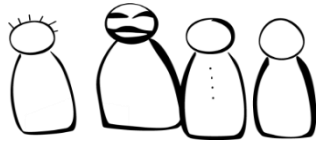


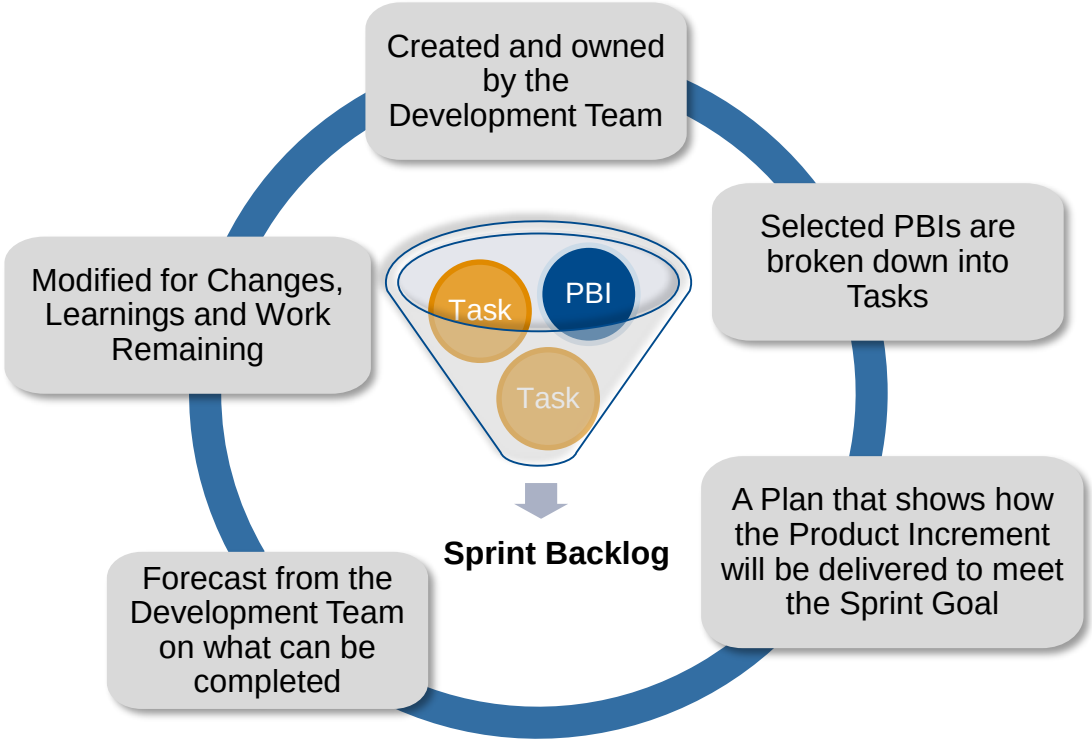
Product Backlog Item



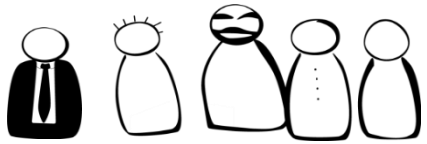


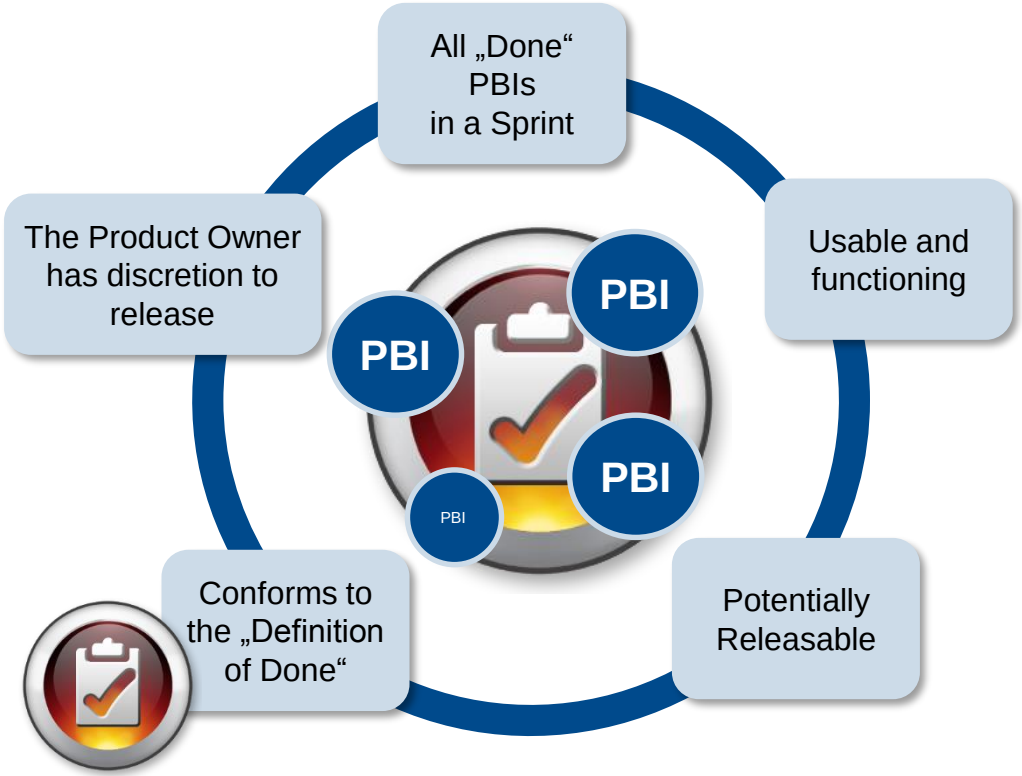
Sprint Backlog





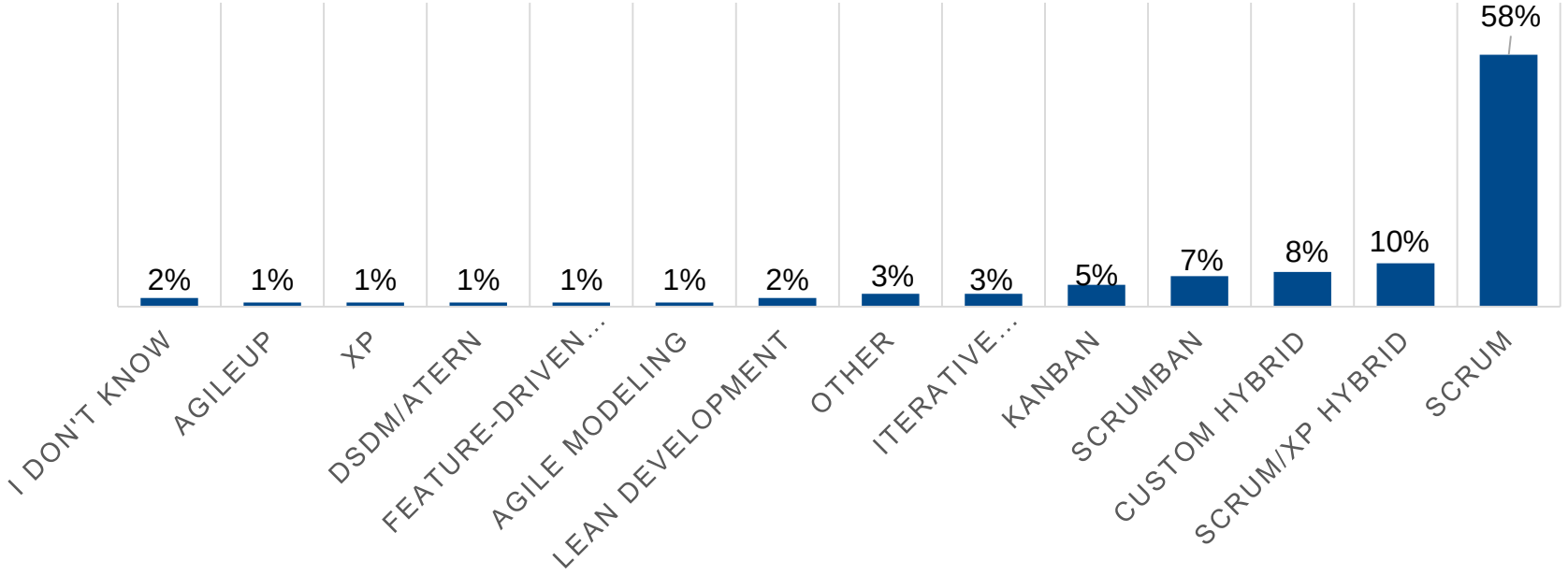
Product Increment





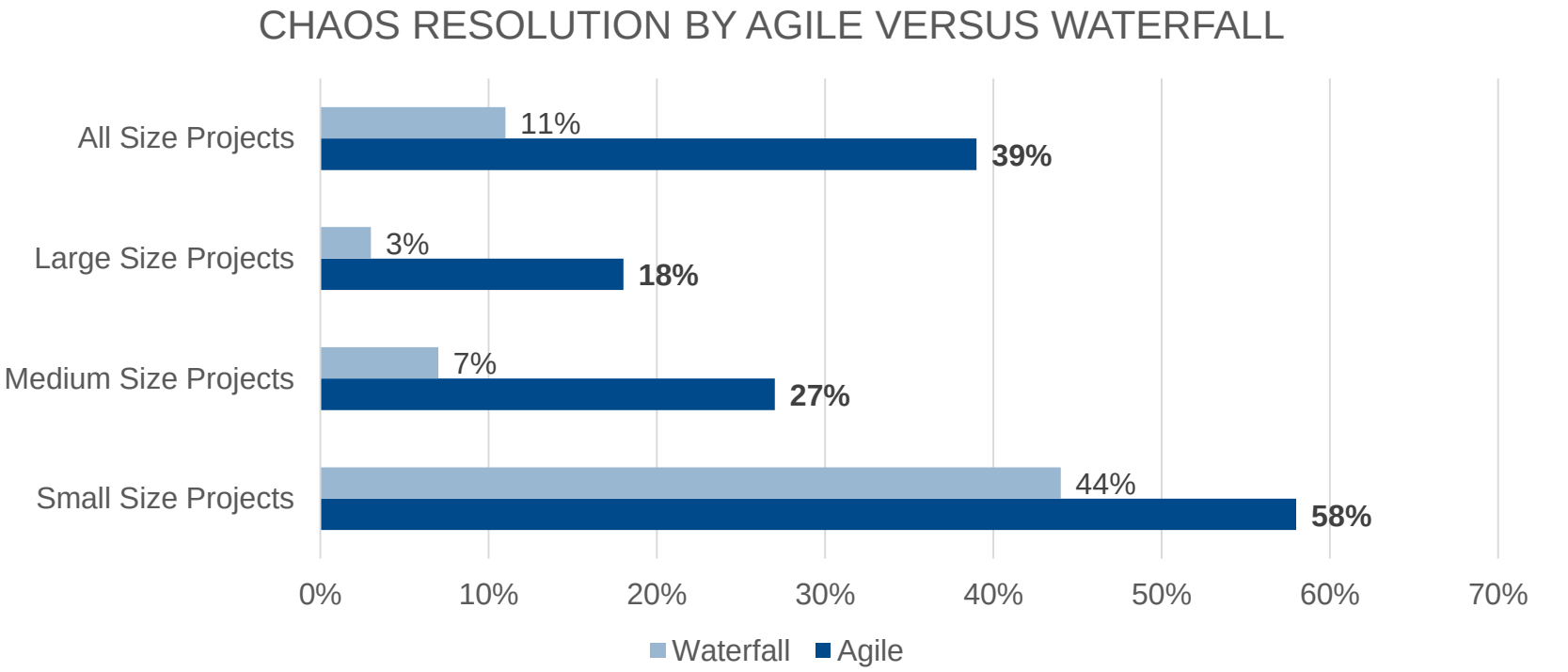
The 10th annual State of Agile survey

What agile methodology is followed?



Quelle: The 10th annual State of Agile survey, VersionOne Inc. 2016

Chaos Report 2015



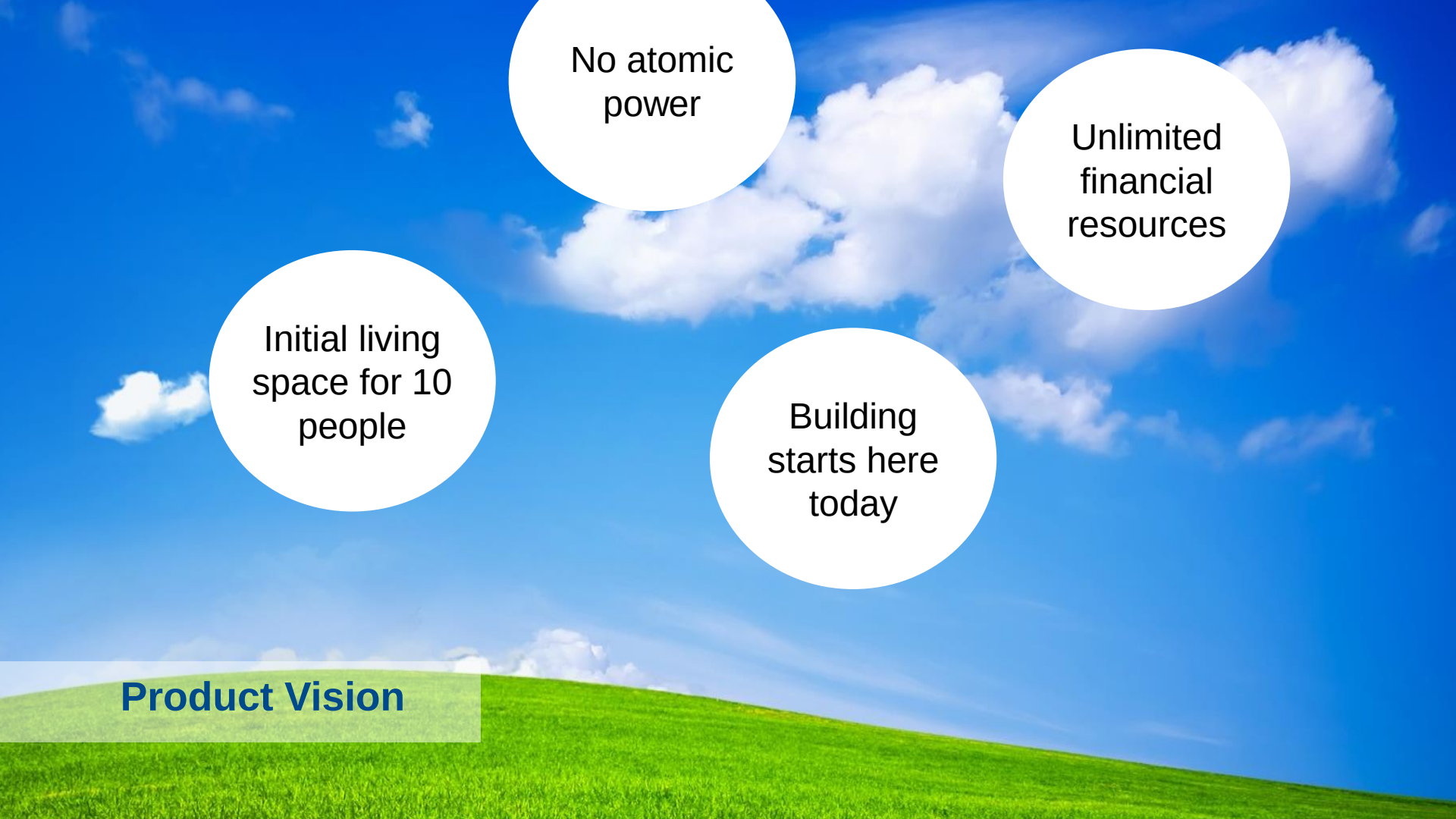
Quelle: Standish Group, Chaos Report 2015

3. PLAY A ROUND OF LEGO!

Sprint 1

Kick -Off

I would like a CO_2 neutral city in Baden-Württemberg.



Product Vision

Release goal

1

The first 10 residents feel welcome, both at home and at work

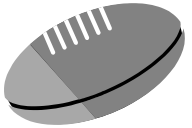
2

Our city is an environmentally friendly, industrial metropole

Lego is our unit of measure

Questions?

Scrum in Action - Preparation



10 Min

1. Divide yourselves into teams of 3-5 team members

2. Develop and document as a team:

- A name and a logo for your team on a flipchart

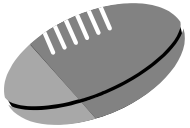
3. Choose a Product Owner for your team

- Your Product Owner will prioritize the requirements and will approve or decline the Product Increment.

4. Pick up your business requirements from your customer

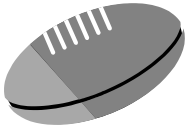
- Your customer are the trainers
- Get your business requirements from your customer
- Get your building materials from your customer

Scrum in Action – The Sprint



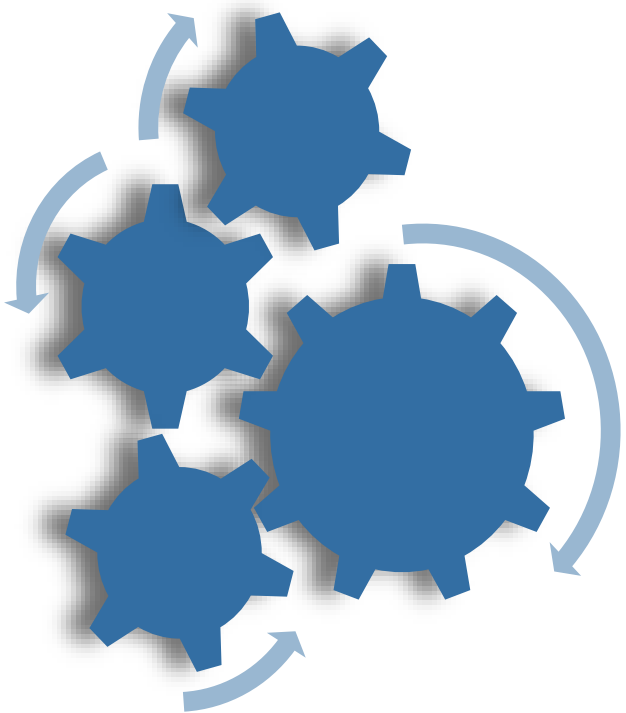
30 Min

1. **Present the product after 30 minutes.**
2. **Adhere to Scrum rules (do the meetings!)**
3. **You decide which requirements you want to show.**
4. **You decide how best to present the requirements.**
5. **Don‘t forget to give your city a name. ☺**



15 Min

Review

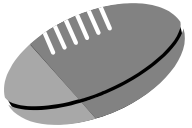


Stand back from the building site:

- What was finished?
- Is it really done?
- Can the result pass the Review?

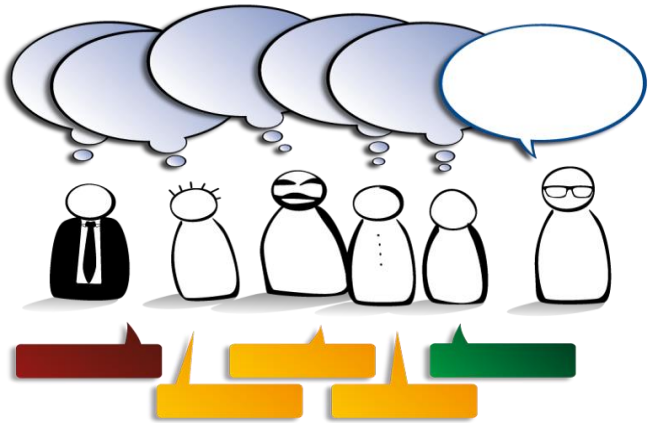
Regardless of what we discover, we understand and truly believe that
everyone did the best job they could,
given what they knew at the time, their skills and abilities,
the resources available, and the situation at hand.

- Norm Kerth



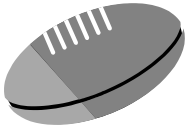
15 Min

Retrospective



Stand back from the building site:

- What worked well?
- What could be done better?
- What would you do differently in the next sprint?

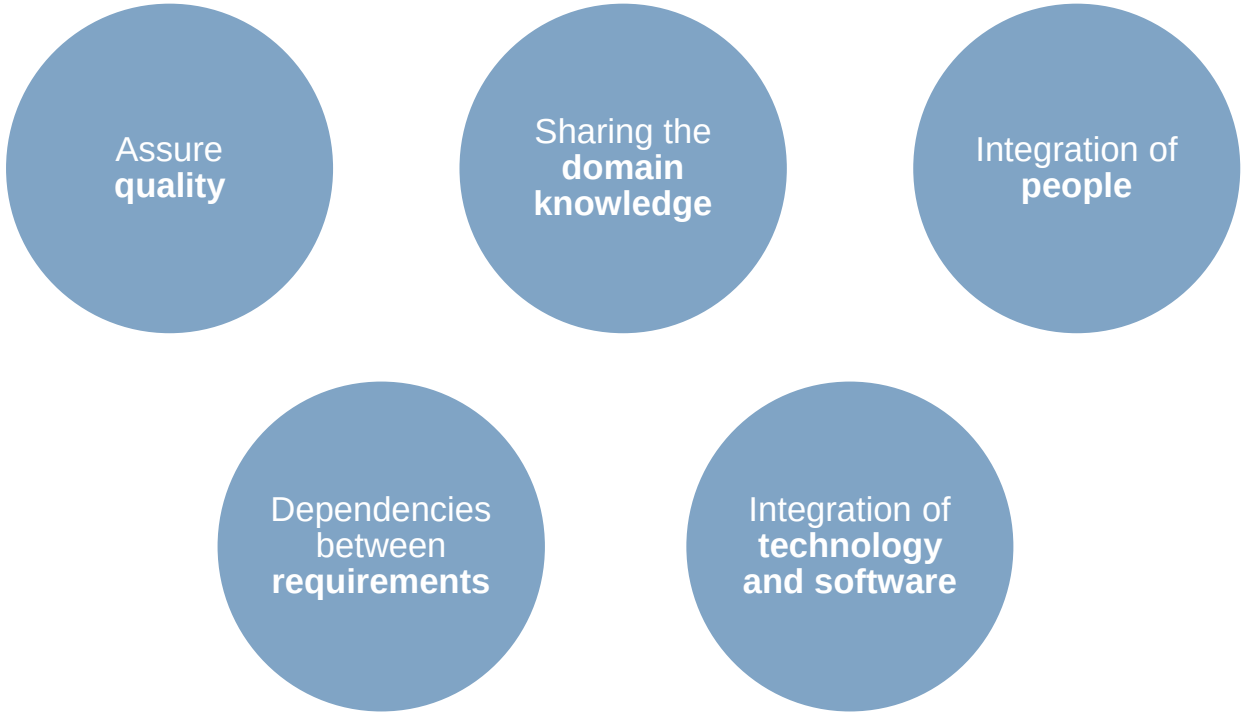


10 Min

Challenges of scaling

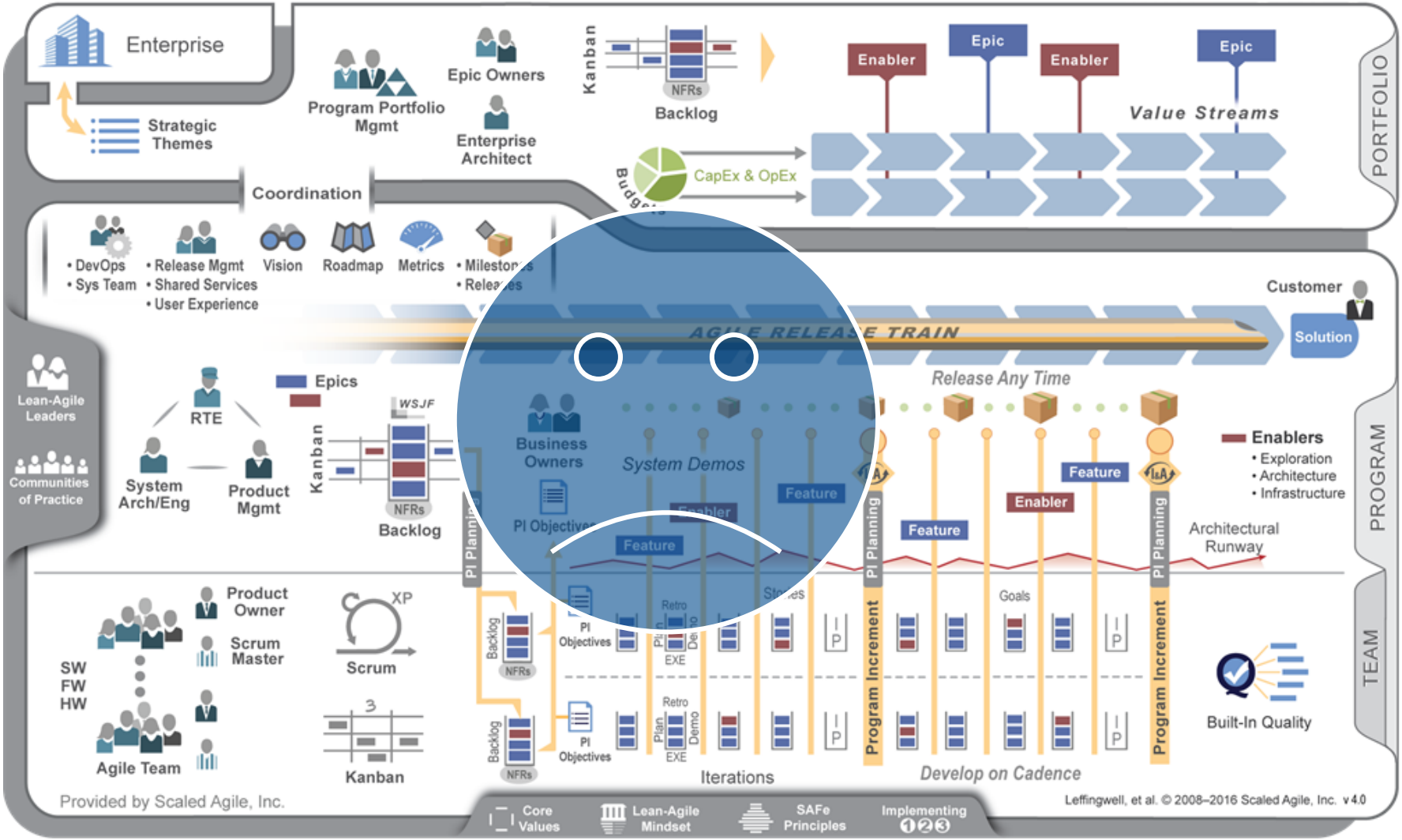
What are the biggest challenges when doing it altogether?

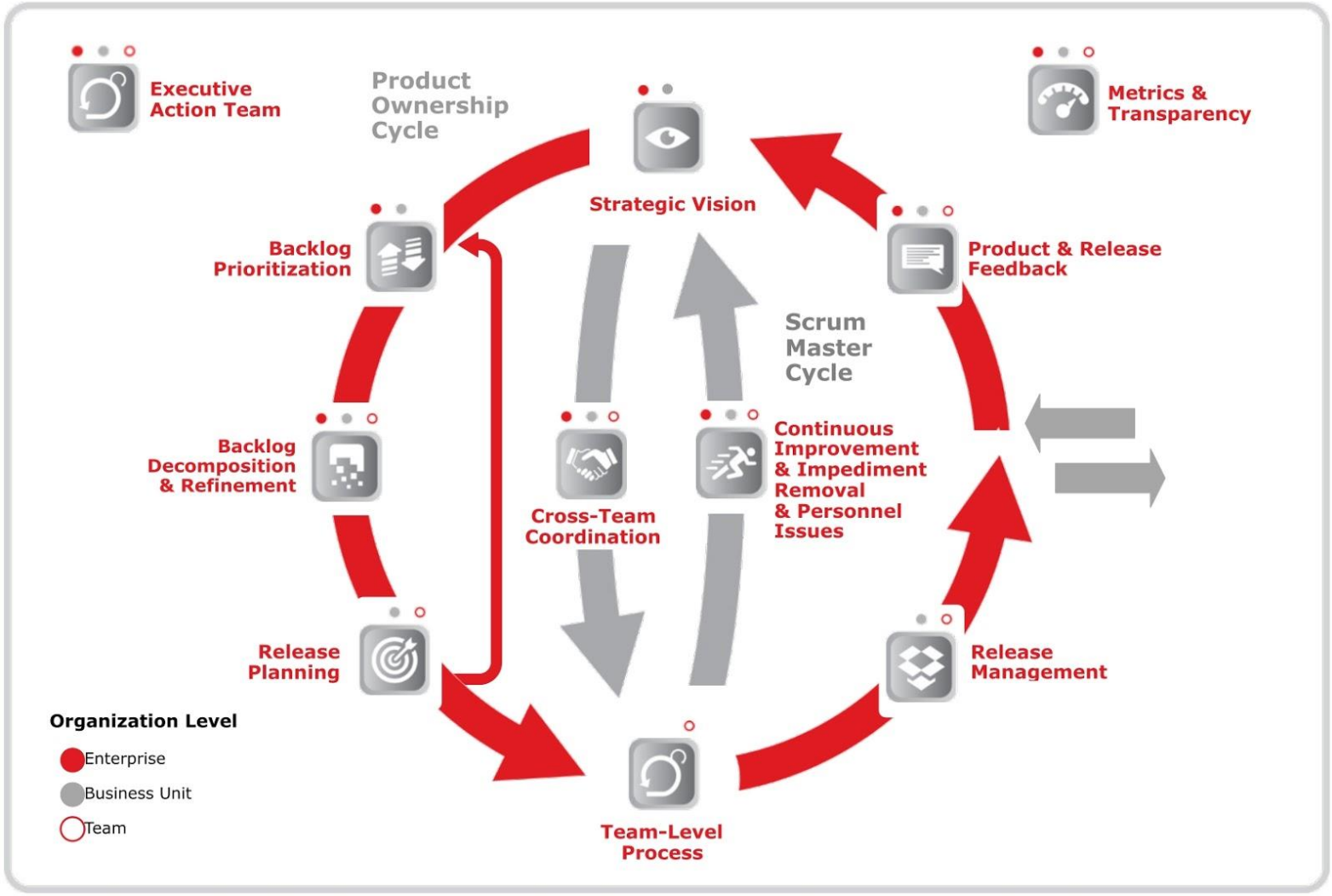
Challenges of scaling



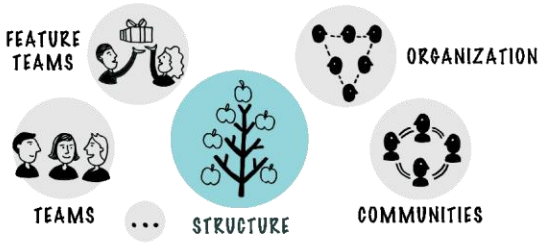
4. APPROACHES TO SCALE SCRUM

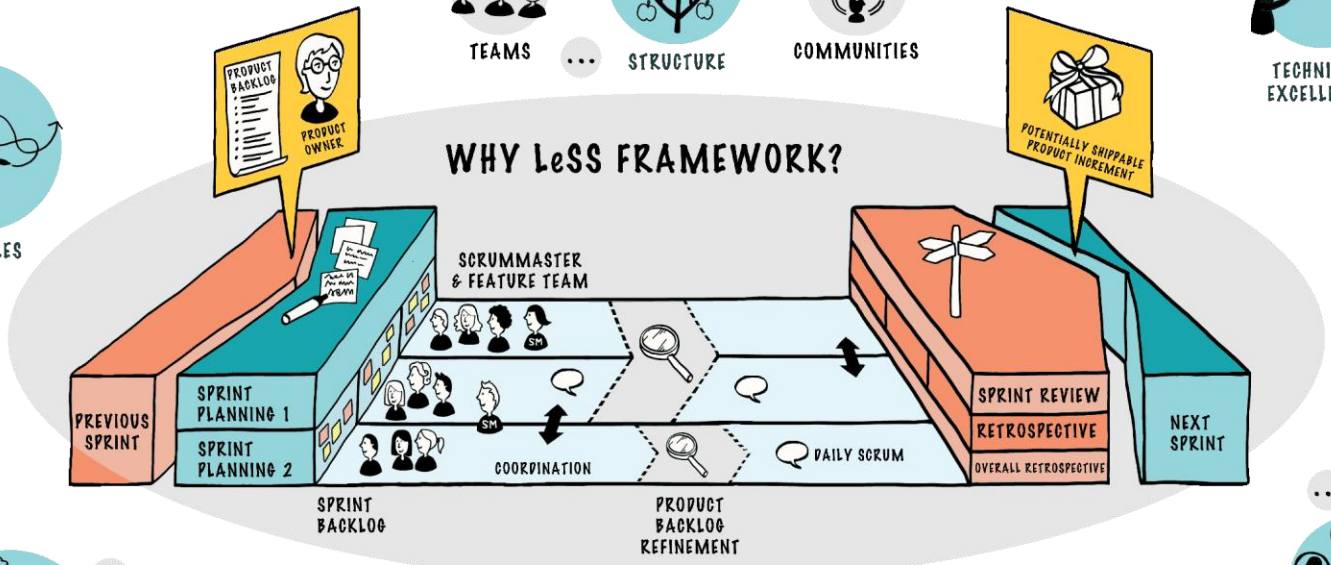
Scaling Frameworks


Enterprise
Strategic Themes
Program Portfolio Mgmt
Epic Owners
Enterprise Architect
Kanban
NFRs
Backlog
Enabler
Epic
Enabler
Epic
Value Streams
PORTFOLIO
Coordination
CapEx & OpEx
• DevOps
• Sys Team
• Release Mgmt
• Shared Services
• User Experience
Vision
Roadmap
Metrics
• Milestones
• Releases
Customer
AGILE RELEASE TRAIN
Solution
Lean-Agile Leaders
Communities of Practice
RTE
System Arch/Eng
Product Mgmt
Epics
WSJF
Kanban
NFRs
Backlog
Business Owners
System Demos
PI Objectives
Feature
Enabler
Feature
Feature
Enabler
Feature
Release Any Time
Enablers
• Exploration
• Architectural
• Infrastructure
Architectural Runway
PI Planning
PI Planning
Program Increment
Program Increment
PROGRAM
Product Owner
Scrum Master
SW
FW
HW
Agile Team
XP
Scrum
3
Kanban
Backlog
NFRs
PI Objectives
Retro
Plan
Demo
EXE
Goals
I P
Iterations
Develop on Cadence
Built-In Quality
TEAM
Provided by Scaled Agile, Inc.
Core Values
Lean-Agile Mindset
SAFe Principles
Implementing 1 2 3
Leffingwell, et al. © 2008–2016 Scaled Agile, Inc. v 4.0

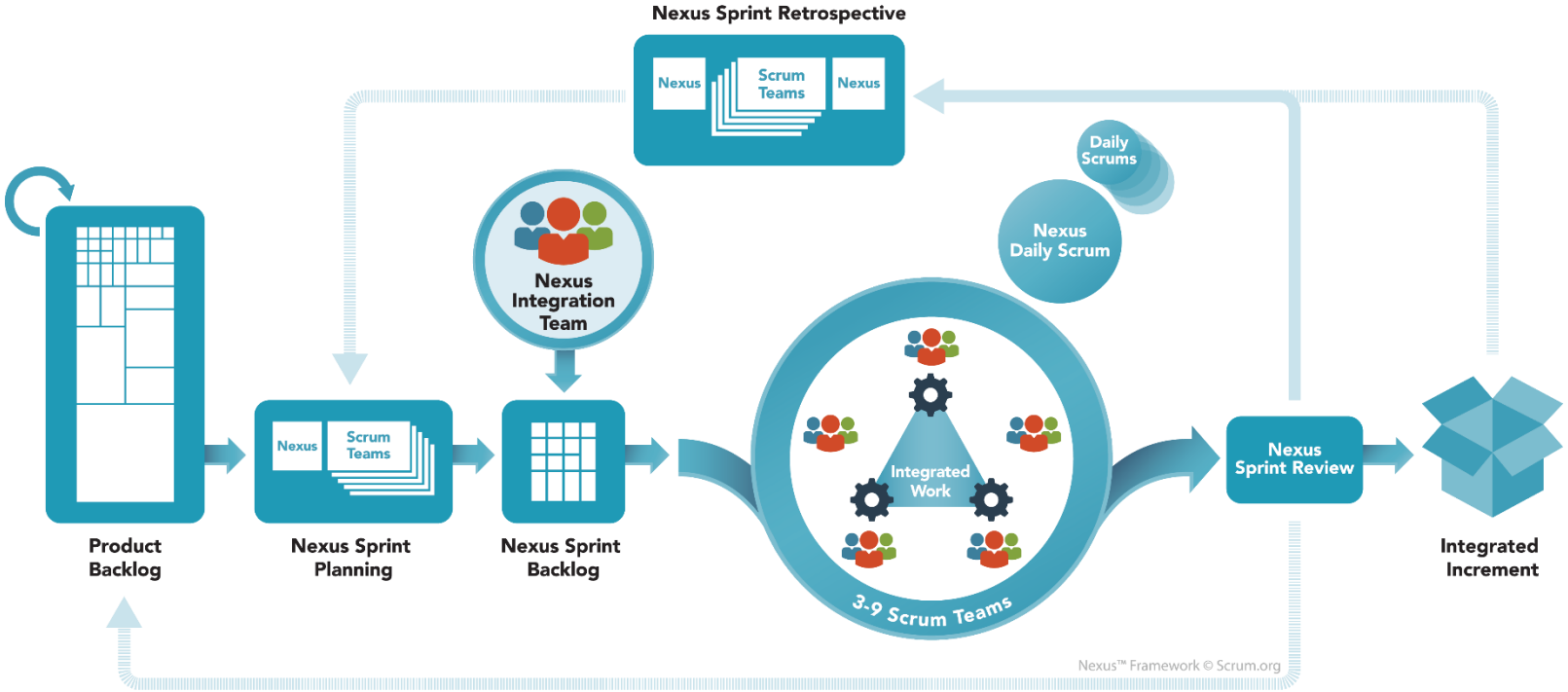

Executive Action Team
Product Ownership Cycle
Metrics & Transparency
Strategic Vision
Backlog Prioritization
Product & Release Feedback
Scrum Master Cycle
Backlog Decomposition & Refinement
Continuous Improvement & Impediment Removal & Personnel Issues
Cross-Team Coordination
Release Planning
Release Management
Team-Level Process
Organization Level
Enterprise
Business Unit
Team

LeSS BOOK CHAPTER 2:
INTRODUCTION





NEXUS FRAMEWORK (Nexus™)



Prerequisits for scaling Scrum

- ✓ Professional Scrum on team level
- ✓ Dedication of organization
- ✓ Organic growth
- ✓ Acceptance of scaling costs

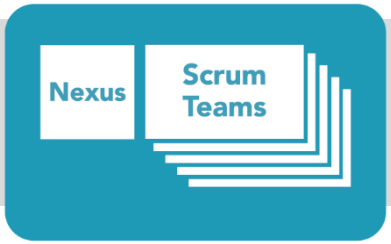
5. SCALING IN DETAIL

Nexus™

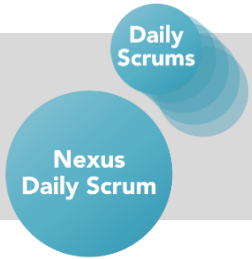
Nexus Events

Events

- coordinate the activities of all Scrum Teams in a Nexus for a single Sprint
- duration of Nexus events is guided by the length of the corresponding events in the Scrum Guide



Nexus Sprint Planning



Nexus Daily Scrum

Nexus Sprint Review

Nexus Sprint Retrospective

Nexus Roles

The Product Owner

A Scrum master

One or more Nexus Integration Team Members

Nexus™ in Action - Preparation

1. Choose ONE Product Owner

- Your Product Owner will prioritize the requirements and will approve or decline the Product Increment.

2. Choose two to three Scrum Masters (one dedicated to NIT)

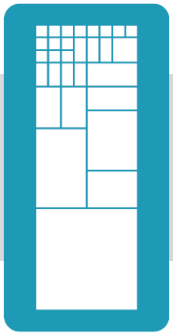
- “The Scrum Master is responsible for ensuring Scrum is understood and enacted. Scrum Masters do this by ensuring that the Scrum Team adheres to Scrum theory, practices, and rules.” [1]

[1] © 2014 Scrum.Org and ScrumInc., Scrum Guide

Nexus Artifacts

Artifacts

- serve to provide transparency
- provide opportunities for inspection and adaptation



Product Backlog

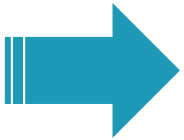
Nexus Goal

Nexus Sprint Backlog

Integrated Increment

And when it fails?

1. Introduce a change team
2. De-escalate
3. Scrumble

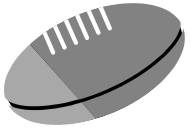


Back to professionalisation

6. DO IT YOURSELF!

Setup Nexus™

Nexus™ in Action - Preparation



10 Min

1. Brace yourself - Nexus is coming…

1.1 … as Product Owner

- Pick up and prioritize the requirements
- Ask a handful of people to help you if required (keep in mind - you're still accountable)

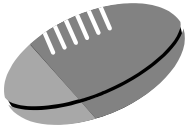
1.2 … all others

- Divide yourselves into teams of 3-5 team members
- Declare one member who is part of the Nexus Integration Team (NIT)

„The Nexus Integration Team is **accountable** for ensuring that an Integrated Increment is produced at least every Sprint. The Scrum Teams are responsible for developing Increments of potentially releasable software." – Nexus Guide[1]

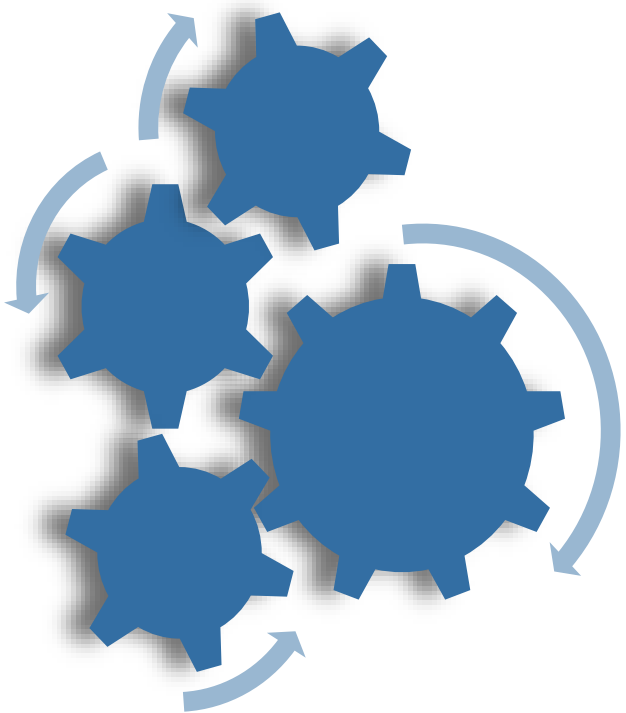
[1] © 2015 Scrum.org, Nexus Guide

NOVATEC



10 + 10
Min

Planning 1 + 2



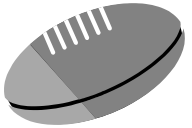
1. Send a representative to the Nexus Planning:

- PO provides domain knowledge and guides/prioritzes selection
- Write down and formulate the Nexus Sprint Goal.
- Refine the Product Backlog with dependencies identified
- Make the Product Backlog transparent

2. Each team performs their individual Scrum Planning

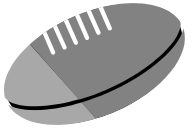
- Plan and adjust the work
- Make the individual Sprint Backlogs transparent (Nexus Sprint Backlog)

Nexus™ in Action – The Sprint



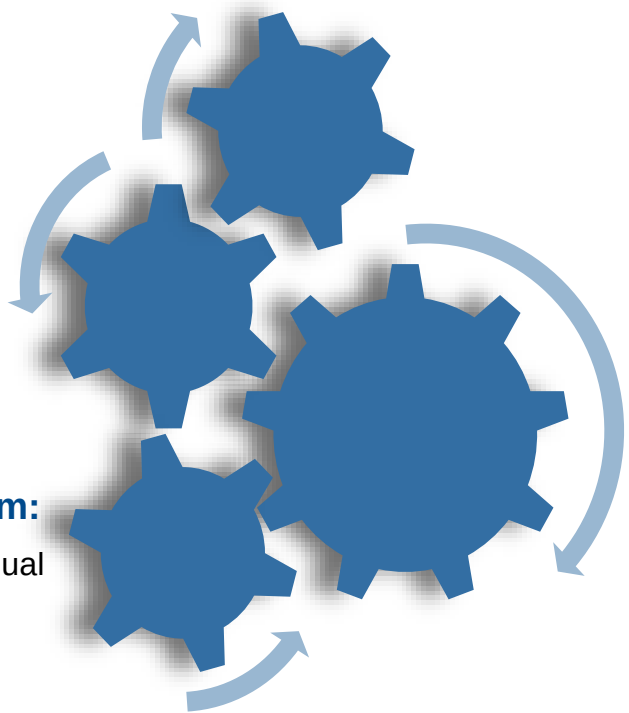
30 Min

1. **Hold at least two Nexus Daily Scrums (e.g. at 10:00 and 20:00)**
2. **Adhere to Nexus rules!**
3. **Present the Integrated Increment after 30 minutes.**
4. **You decide which requirements you want to show.**
5. **Don‘t forget to give your city a name.**



~1-2 min each

Daily Scrum

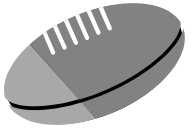


1. Each team sends one representative to the Nexus Daily:

- Was the previous day's work successfully integrated? If not, why not?
- What new dependencies have been identified?
- What information needs to be shared across teams in the Nexus?

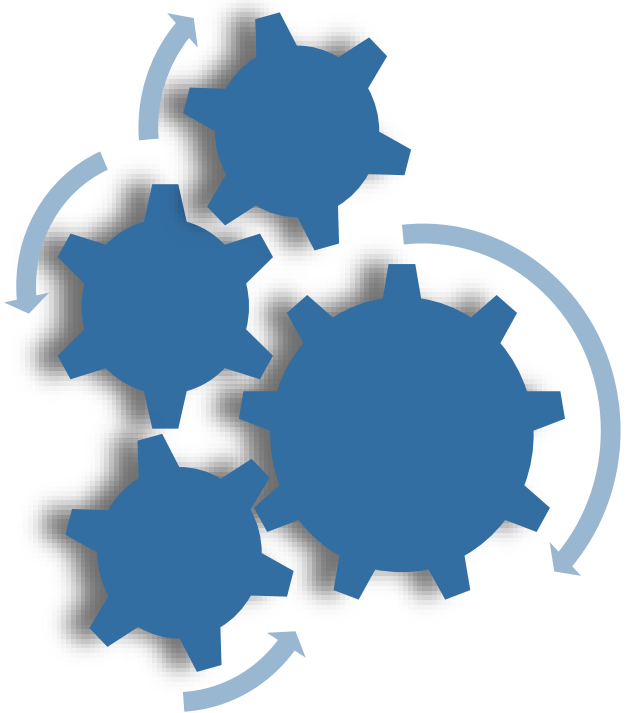
2. Go back into your teams and hold your individual Daily Scrum:

- Work that is identified during the Nexus Daily Scrum is taken back to individual Scrum Teams for planning inside their Daily Scrum events.



15 Min

Review

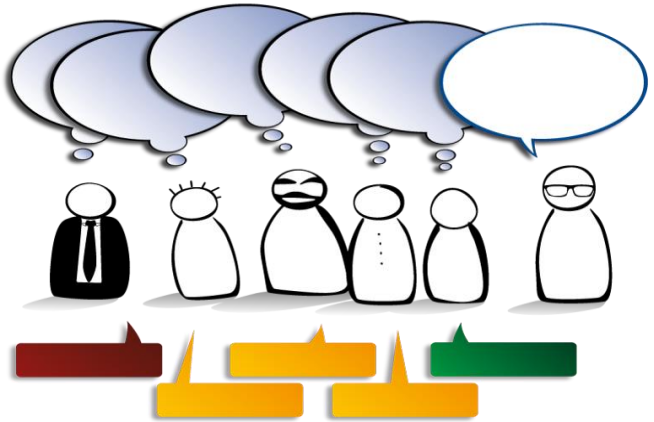


Stand back from the building site:

- What was finished?
- Is it really done?
- Can the result pass the Review?

10 + 10 Min

Retrospective 1 + 2



Every Retrospective should address the following subjects:

- Was any work left undone? Did the Nexus generate technical debt?
- Were all artifacts, frequently (as often as planned) successfully integrated?

1. Send a representative to the Nexus Retrospective:

- Identify issues that have impacted more than a single team

2. Each Scrum Team holds their own Sprint Retrospective:

- (You can) Use issues raised from the first part of the Nexus Retrospective as input to their team discussions
- Form actions to address these issues

THANKS ☺

Dominik Maximini and Florian Sauter

NOVATEC