The new age of flow

Flow – That is more then continuous deployment
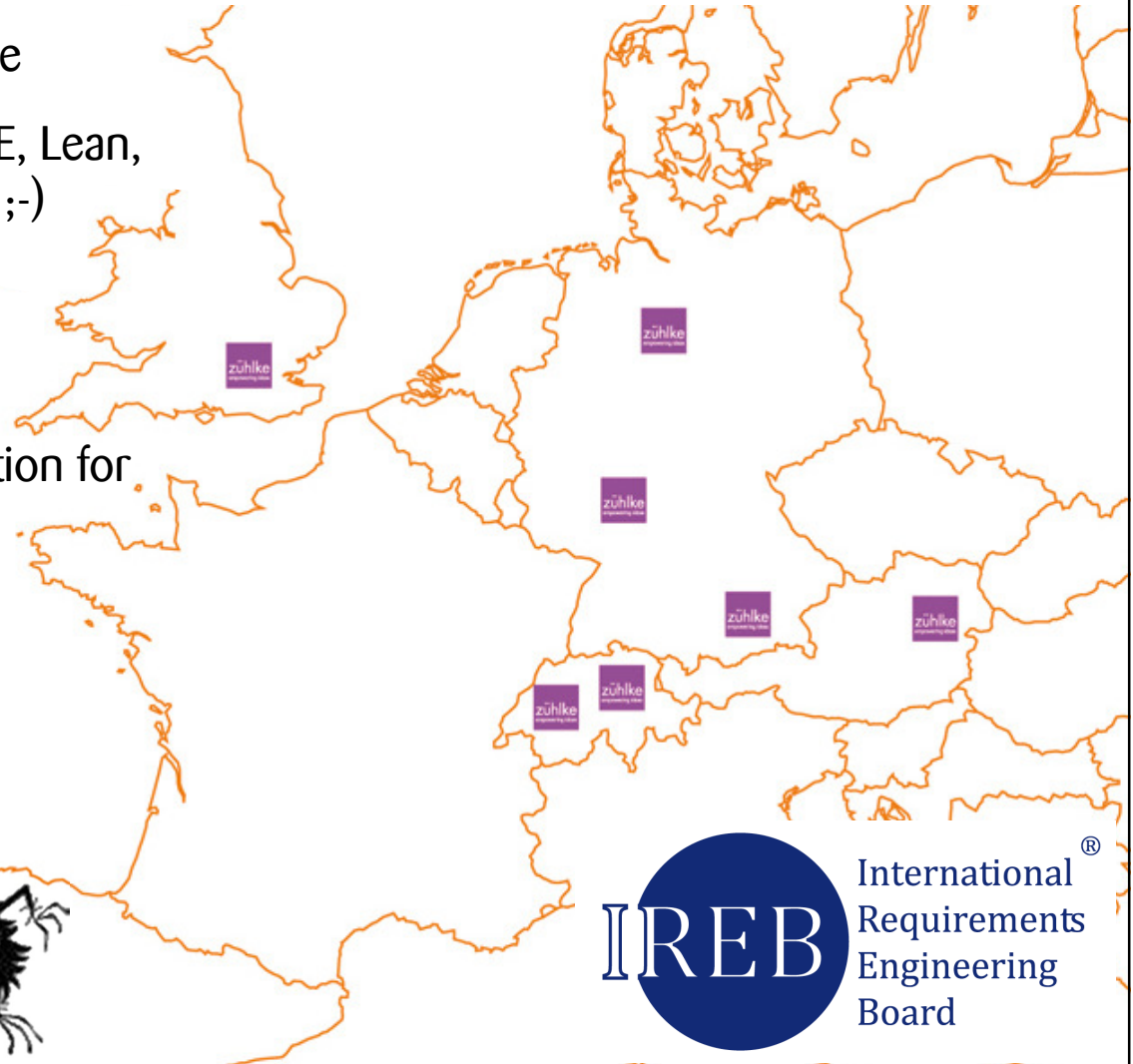**Flow – That is a mindset of an organization**

Rainer Grau
Executive Director & Partner
Distinguished Engineer

- Executive Director and Partner Zühlke

- Distinguished Consultant for SPM, RE, Lean, Agile, Change Mgmt (not for Testing ;-)

- Board of directors IREB

- Board member ISPMA

- Head STC Informatics Swiss Association for Quality

- Founder Swiss Agile Leaders Circle

Die Hard* –
or: the old school

Die Hard (I – IV)*

A set of nice movies with Bruce Willis – you do not want to try that…

zühlke
empowering ideas

IREB International Requirements Engineering Board ®
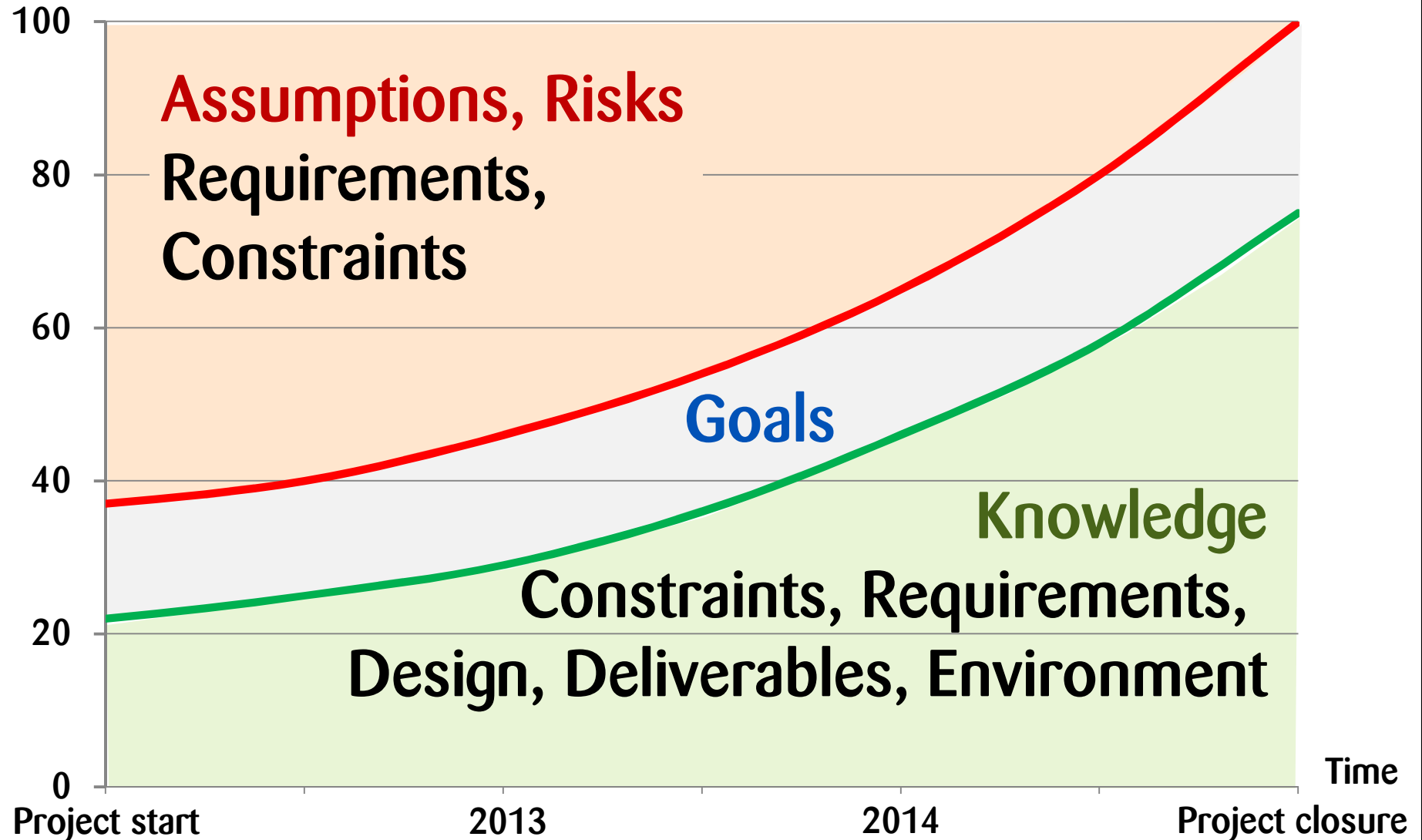
Rainer Grau, Executive Director

Failure 1: Detailed Upfront work is value

Failure 2: Validation without real user feedback

Failure 3: Long Term planning avoids risks

Knowledge [per cent]

100

Assumptions, Risks
Requirements, Constraints

80

60

Goals

40

Knowledge

20

Constraints, Requirements, Design, Deliverables, Environment

0

Time

Project start   2013   2014   Project closure

Failure 4: Quality can be tested and built at the end

Adrenalin Junckies* –
or: the agile extreme

*) Adrenaline Junkies and Template Zombies

A book by Tom de Marco: recommended reading for everybody in IT

International
Requirements
Engineering
Board

Rainer Grau, Executive Director

…Backlog, Sprints, the Team and a (good) PO

PO

Sprint Goal

Product Backlog

Sprint Backlog

Tasks

2–4 weeks

24hrs

Daily Scrum Meeting

Potentially Shippable Product Increment
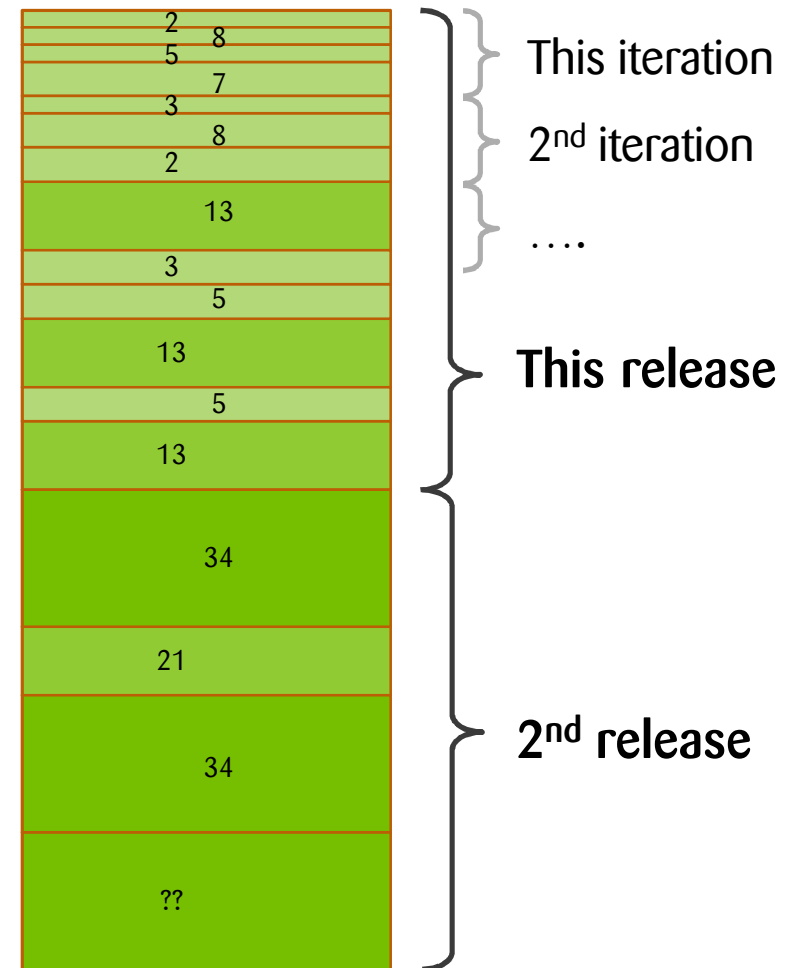
Sprint Planning

Sprint Review

Sprint Retrospectives
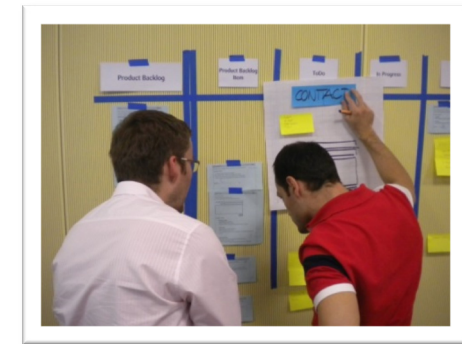
A team sharing tacit knowledge

Realistic, instead of Management defined, Estimation and Prioritization
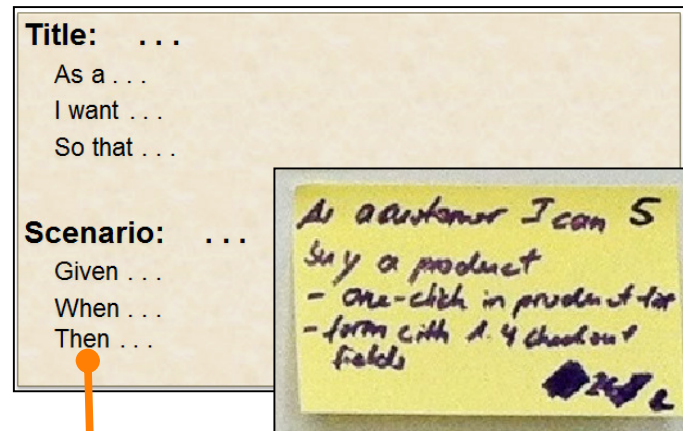
Planning Poker

Homer **21**

Backlog item X

Marge **5**

Bart **1**

Lisa **5**

Maggie **3**

Homer **3**

Backlog item X

Marge **3**

Bart **8**

Lisa **5**

Maggie **5**

Product Backlog

2	8
5	7
3	
8	
2	
13	
3	
5	
13	
5	
13	
34	
21	
34	
??	

This iteration

2nd iteration

….

This release

2nd release
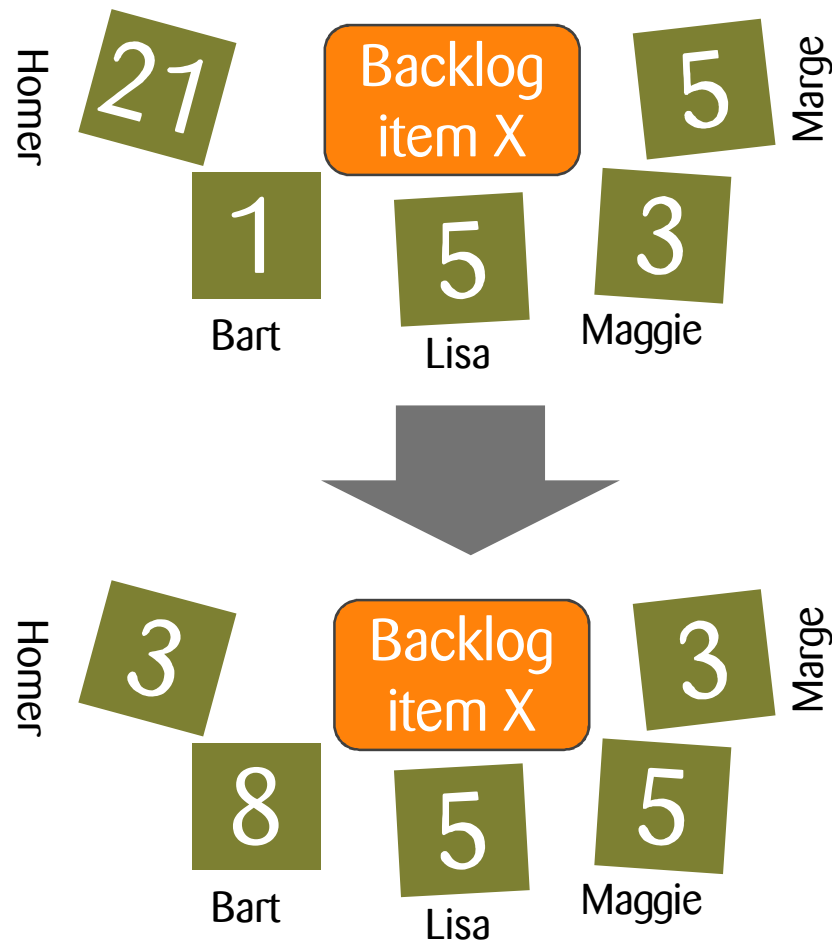
A lightweight RE maturity model

Definition of Ready

User Stories

**Maturity Definition
for Dev-Gate**

Title: . . .
  As a . . .
  I want . . .
  So that . . .

Definition of Done

Scenario: . . .
  Given . . .
  When . . .
  Then . . .

**Function specific
Acceptance criteria**
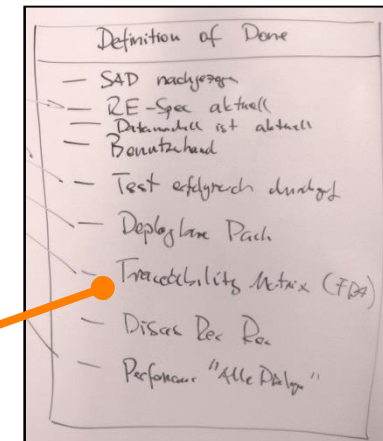
**Additional
Acceptance criteria**

From use cases to user stories

Online Shop (use case diagram: Customer, Logon, Search Product, Add Product to Basket, Manage Basket — Extension points: AuthSession, Deliver Order, Make Payment, Credit Card Company, UPS)
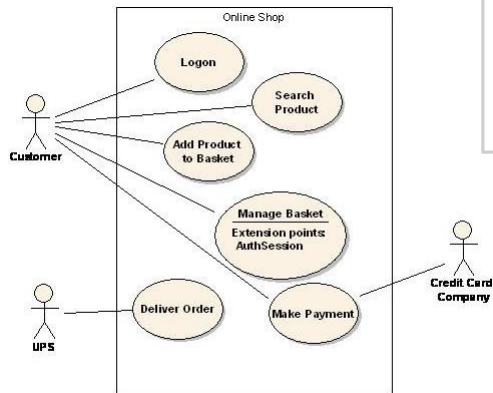
C ard
C ommunication
C onfirmation

collaboration and feedback

Title: . . .
  As a . . .
  I want . . .
  So that . . .

Scenario: . . .
  Given . . .
  When . . .
  Then . . .

I ndependent
N egotiable
V aluable
E stimable
S mall
T estable

As a customer I can S
buy a product
- one-click in product list
- form with 1..4 checkout fields

acceptance criteria

quality criteria

Inspired by Ux methods
- Personas
- Storyboards
- Contextual Inquiry

Rudi checks the turbo loader wheel. T...
replaced urgently...

Service No 0023415
Ship Helena, BuenosAires
arrives at
Leaves at
Service No 002337
Service No 002311
job @helena.ar
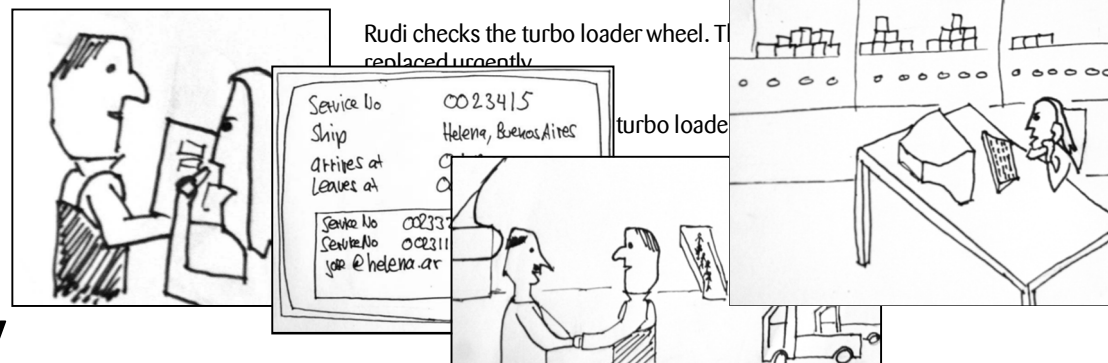
Intouchable*

*) Intouchable

A Movie about extreme viewpoints that emerge into a better world

IREB International Requirements Engineering Board®

Rainer Grau, Executive Director

Yes, there are business projects with fix milestones

Demand **Product Mgmt** **Development** **Product**

Program Backlog **Team Backlog**

Program 1

Q1/2013

2013

Q2 / 2013

Time

Product 1

Program 2

Project 4

Team Backlog

Q1/2013

Project 5

Project 7

Q2 / 2013

Project 3

Project 6

Time

2013 2014 2015

Team Backlog

Q1/2013

2014

Q2/2013

Time

Service 2
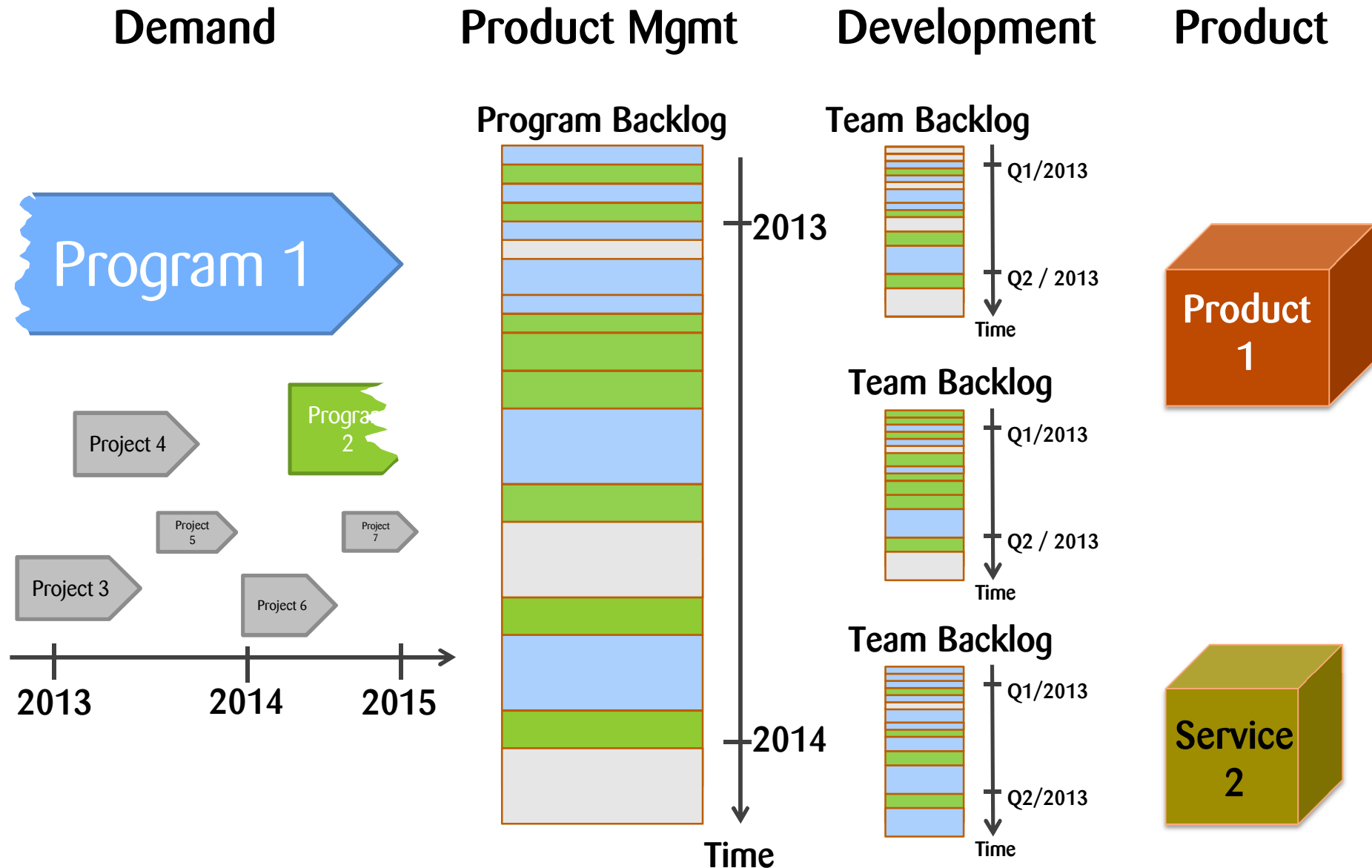
Yes, there are releases (at least external ones)

External releases

Internal release n | Internal release n+1 | Internal release n+2

Release Review & Planning

on program level

RE workshops

on team level

Product Mgmt

Feedback

Sprint | Sprint | Sprint | Sprint | Sprint | Sprint | Sprint | Sprint

Sprint Planning
Sprint Review
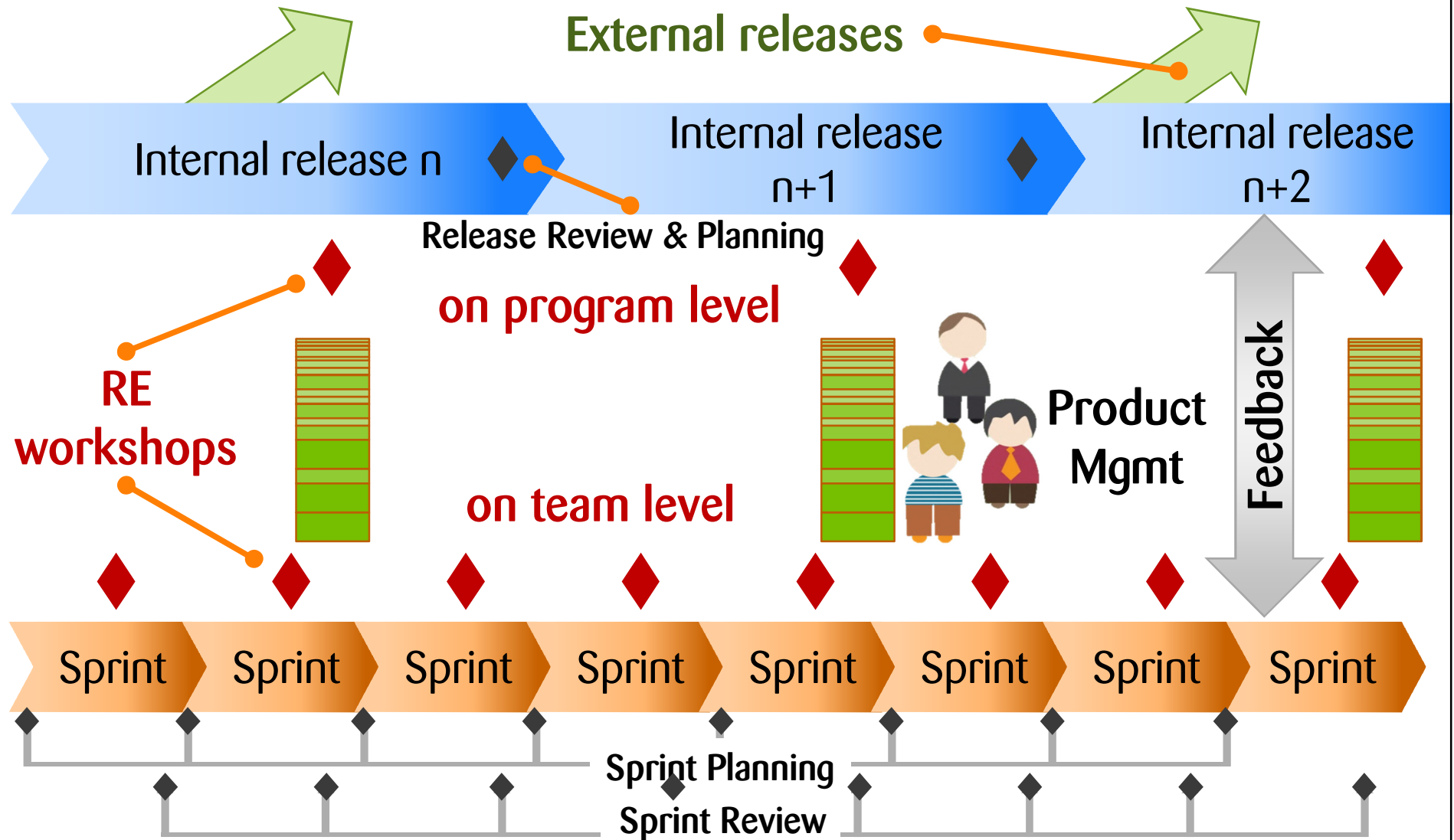
Product Development with n Teams

The sixth sense*

*) The sixth sense

A movie with Bruce Willies (again ;-)
Extrasensory perceptions help us to find new ways…

International Requirements Engineering Board
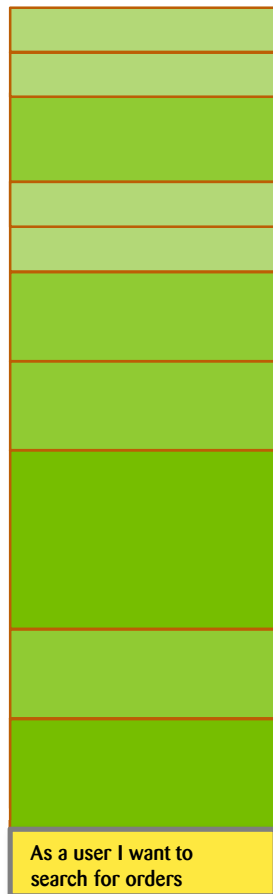
Rainer Grau, Executive Director

We live in a continuous world – we love flow

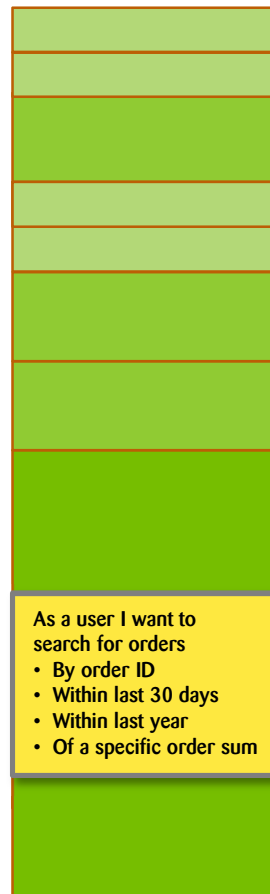# Our thinking is flow – things mature, we nurture
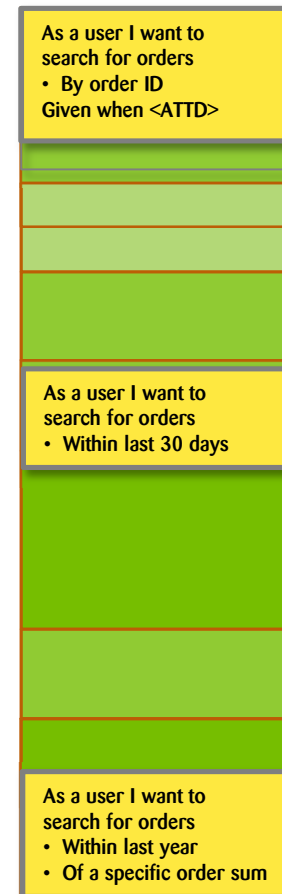# The RE-section of the life cycle of a user story

10 weeks ago   **6 weeks ago**   **3 weeks ago**   **today**

As a user I want to search for orders
• By order ID

As a user I want to search for orders
• By order ID
Given when <ATTD>

As a user I want to search for orders
• By order ID
• Within last 30 days
• Within last year
• Of a specific order sum

As a user I want to search for orders
• Within last 30 days
• Within last year
• Of a specific order sum

As a user I want to search for orders
• Within last 30 days

As a user I want to search for orders

As a user I want to search for orders
• Within last year
• Of a specific order sum

Our thinking is flow – things mature, we nurture
The complete life cycle of every user story

3 months ago **10 weeks ago** **today** **in 2 weeks**
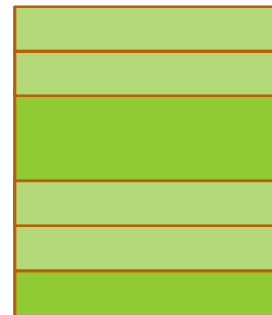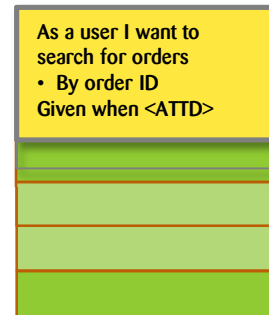

Idea
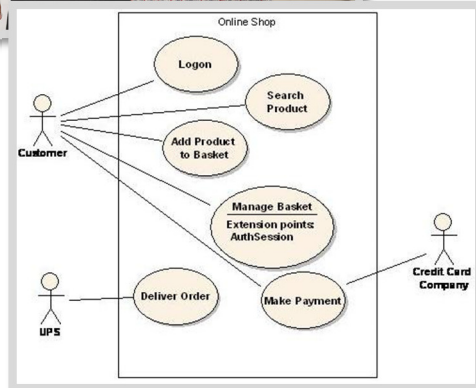
Requirements and acceptance criteria

As a user I want to search for orders
• By order ID
Given when <ATTD>

Dev

Ops

As a user I want to search for orders

As a user I want to search for orders
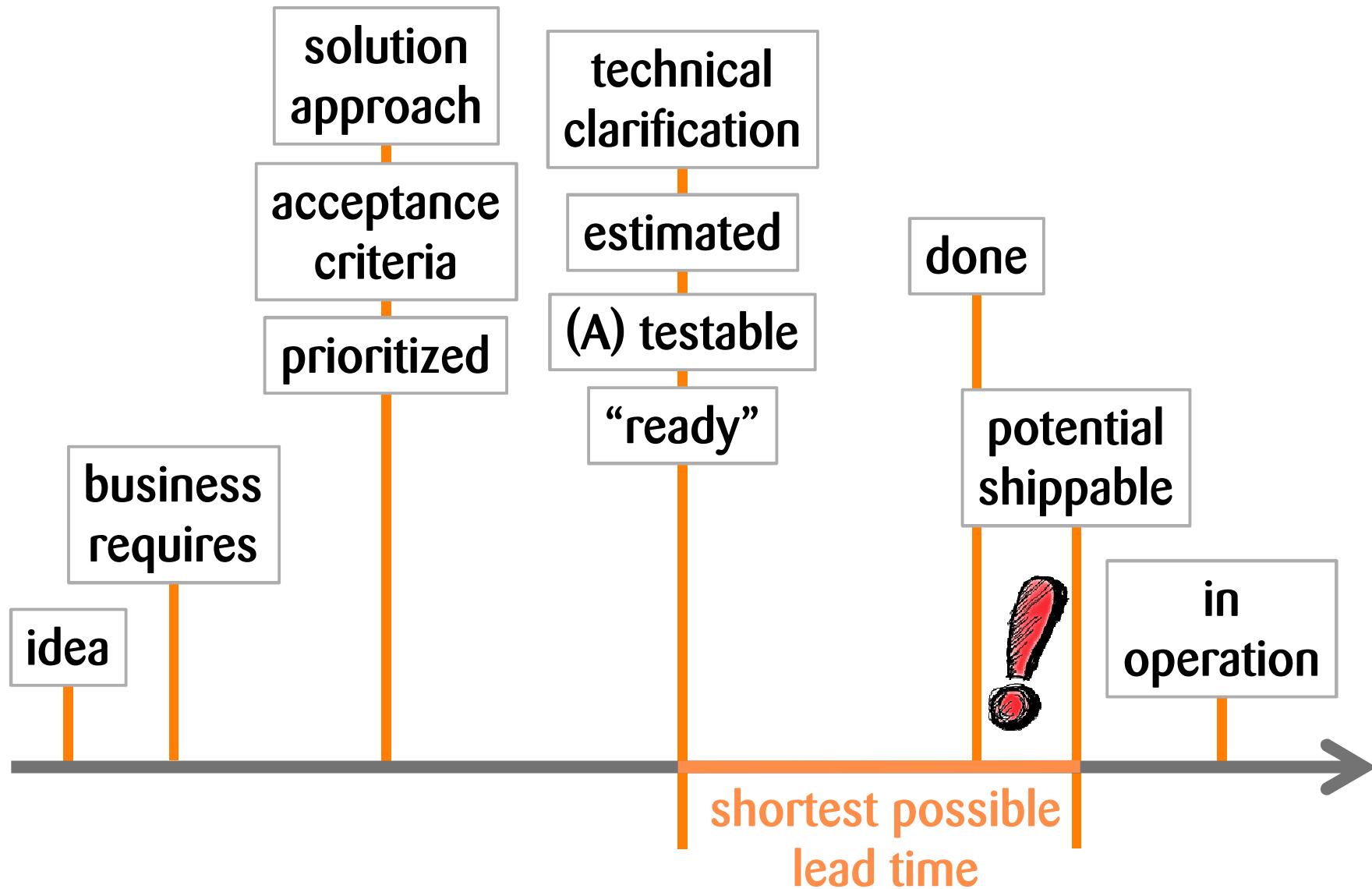
As a user I want to search for orders
• Within last year
• Of a specific order sum
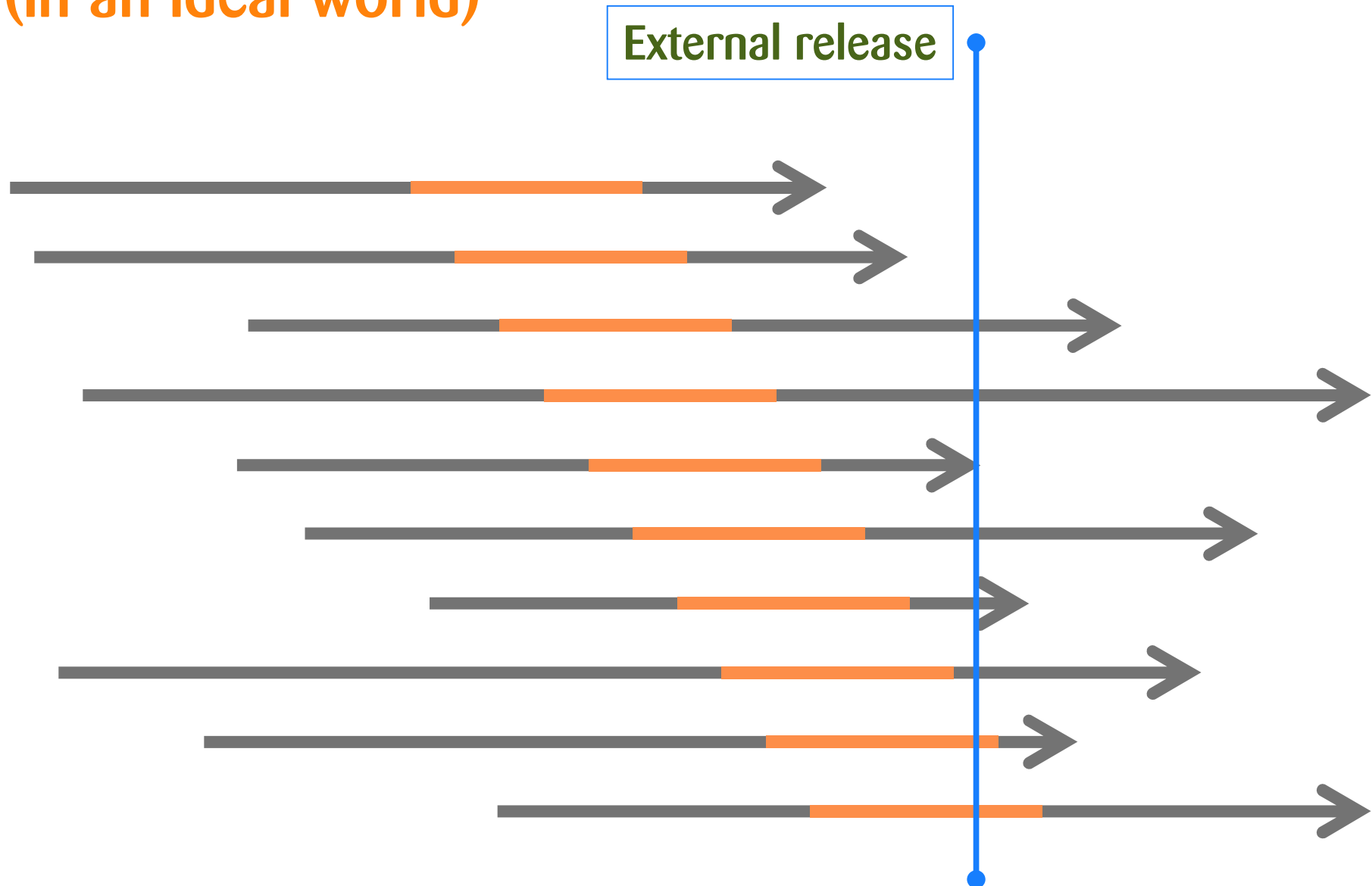
The complete life cycle of a user story

The complete life cycle of many user stories (in an ideal world)

External release

Use flow oriented development – release on demand

Every single requirement (user story) has its specific life cycle

Link requirements engineering to test engineering

- "Acceptance testable" is a first class technical attribute

Minimize the lead time "ready" to "potential shippable"

- Increase test automation for acceptance testing

- Reduce staging process to zero (zero deployment)

Do not work in batches – minimize batches

- Sprints do not represent batches – sprints measure velocity

- Releases do not represent batches – satisfy customer needs

➔ **strive for a flow mindset**

Let development flow