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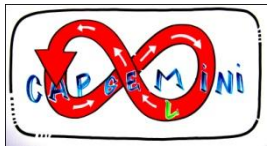

Scrum Basics

Marek Majchrzak, Andrzej Bednarz

Wrocław, 11.10.2011

GEMEINSAM. ENERGIEN FREISETZEN.

AGENDA

- **Introduction**
- Process overview
- Roles & responsibilities
- Scrum artefacts
- Scrum meetings

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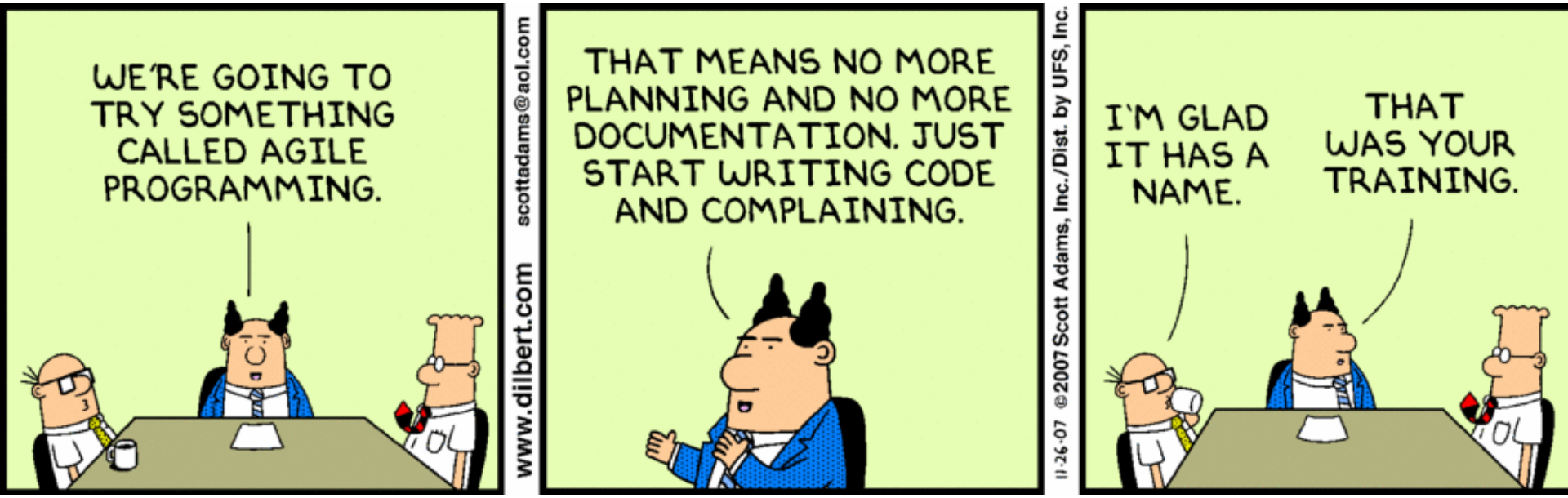

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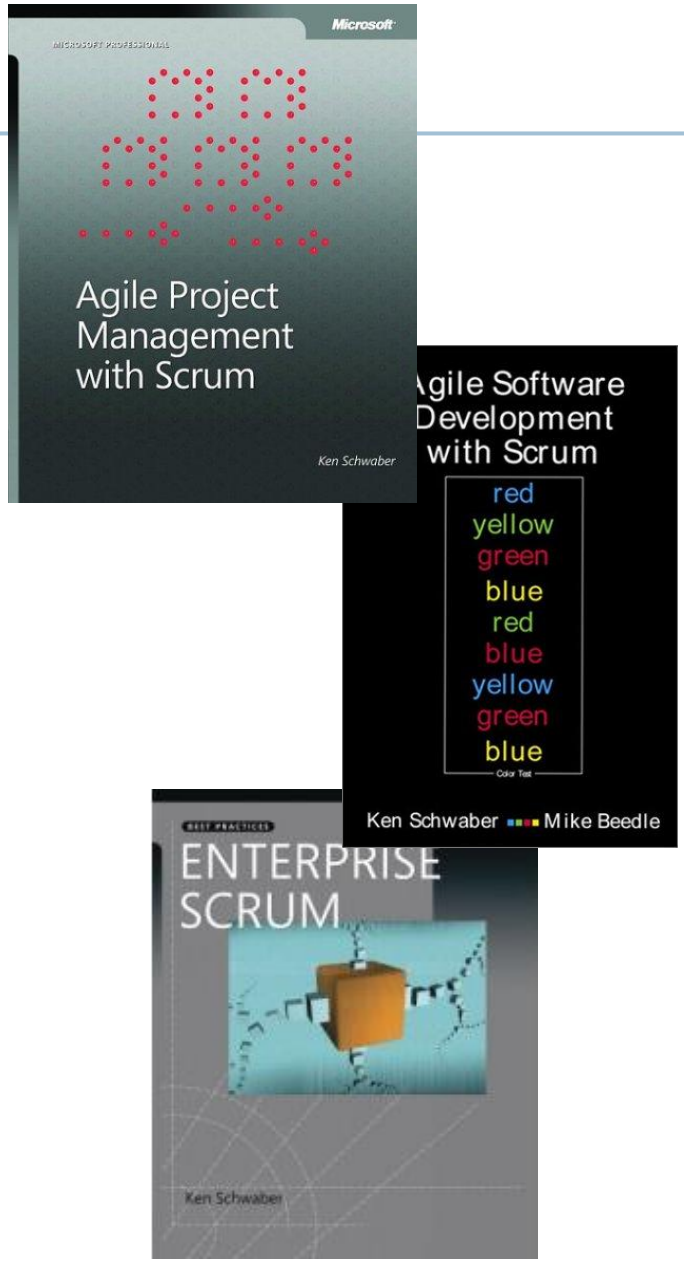
Scrum Origins

- ***First described by Takeuchi and Nonaka***
  - "The New, New Product Development Game", Harvard Business Review, 1986
- ***Jeff Sutherland***
  - Initial scrums at Easel Corp in 1993
  - IDX and 500+ people doing Scrum
- ***Ken Schwaber***
  - ADM
  - Scrum presented at OOPSLA 96 with Sutherland
  - Author of three books on Scrum
- ***Ken Schwaber and Mike Cohn***
  - Co-founded Scrum Alliance in 2002, initially within the Agile Alliance
- ***Lean production - values and organization***
- ***Concurrent engineering - self organizing Teams***



Source: mountaingoatsoftware.com

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Scrum has been used by:

- Microsoft
- Yahoo
- Google
- Electronic Arts
- Lockheed Martin
- Philips
- Nokia
- IBM
- Capital One
- BBC
- Salesforce.com

- Capgemini
- Nokia Siemens Networks
- Siemens
- BL Stream
- Comarch
- Sabre
- …

Source: mountaingoatsoftware.com

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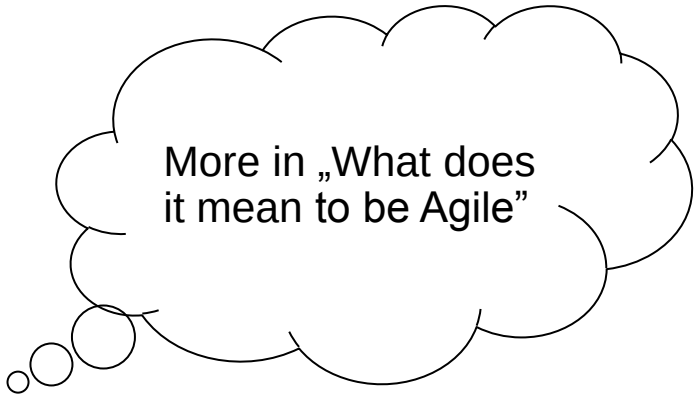
Scrum is an Agile Process

The Agile Manifesto

- Individuals and interactions
- Working software
- Customer collaboration
- Responding to change



Principles behind the Agile Manifesto

- Deliver working software frequently
- Welcome changing requirements
- Self-organizing teams
- The team reflects on how to become more effective

•***Empirical Process***

- Environment and prerequisites are not defined completely
- Requirements change over time
- The knowledge about the best approach is incomplete
- The system is complex, i.e. not simple and never fully knowable

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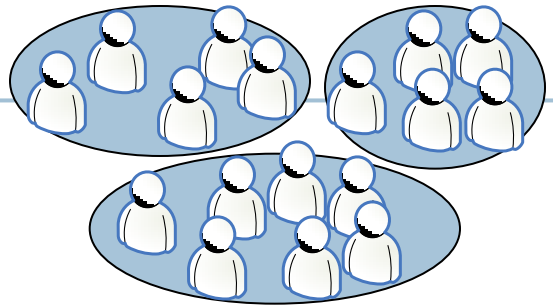
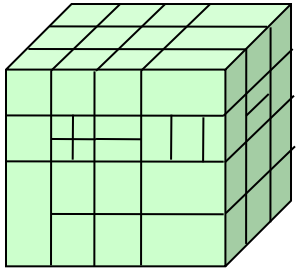
Scrum in a nutshell

Split your organization

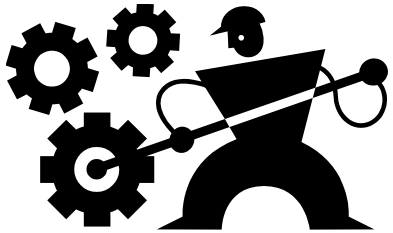


Split your product

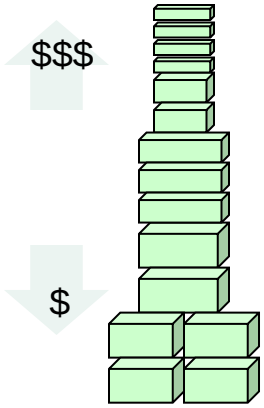


~~Large group~~ spending ~~a long time~~ building a ~~huge thing~~
Small team spending a little time building a small thing
... but integrating regularly to see the whole

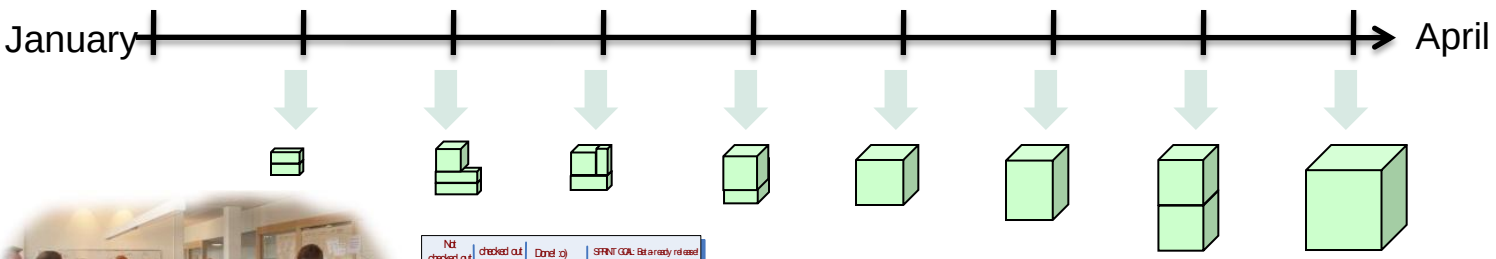
Optimize process

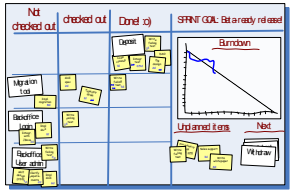


Optimize business value



Split time





Source: „Henrik Kniberg, The Essence of Agile" from AgileEE 2010 in Kiev, http://blog.crisp.se/henrikkniberg/2010/10/09/1286625660000.html

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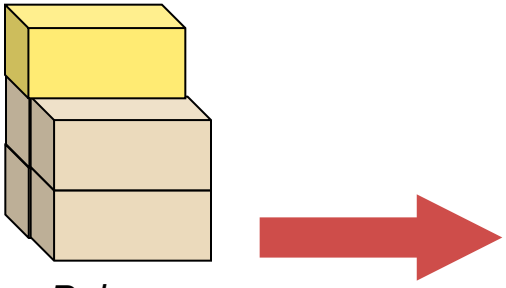
The Sprint transforms the requirements from the Backlog into running, tested and documented software

The Scrum Flow

Artifacts
Ceremonies

Product Backlog



Release Planning

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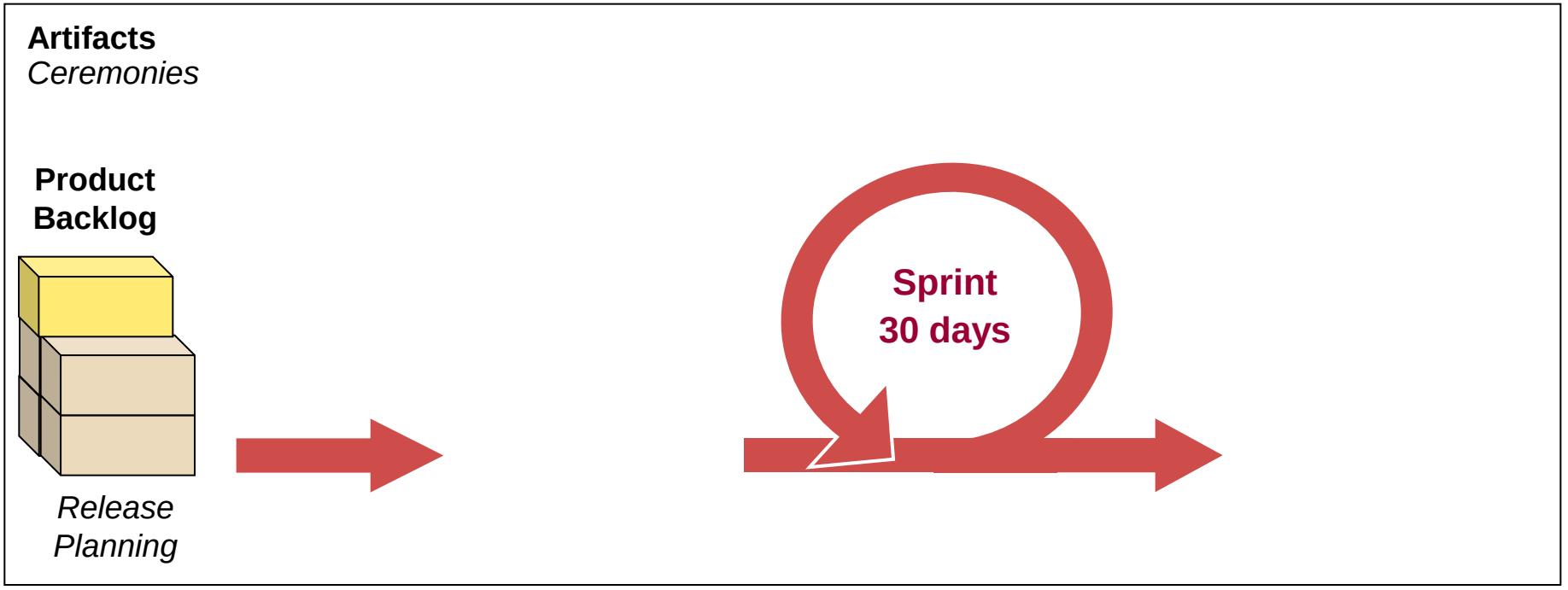
The Scrum Flow



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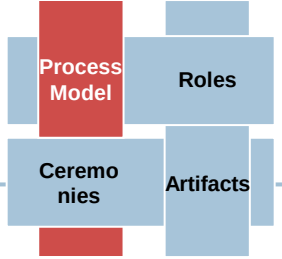
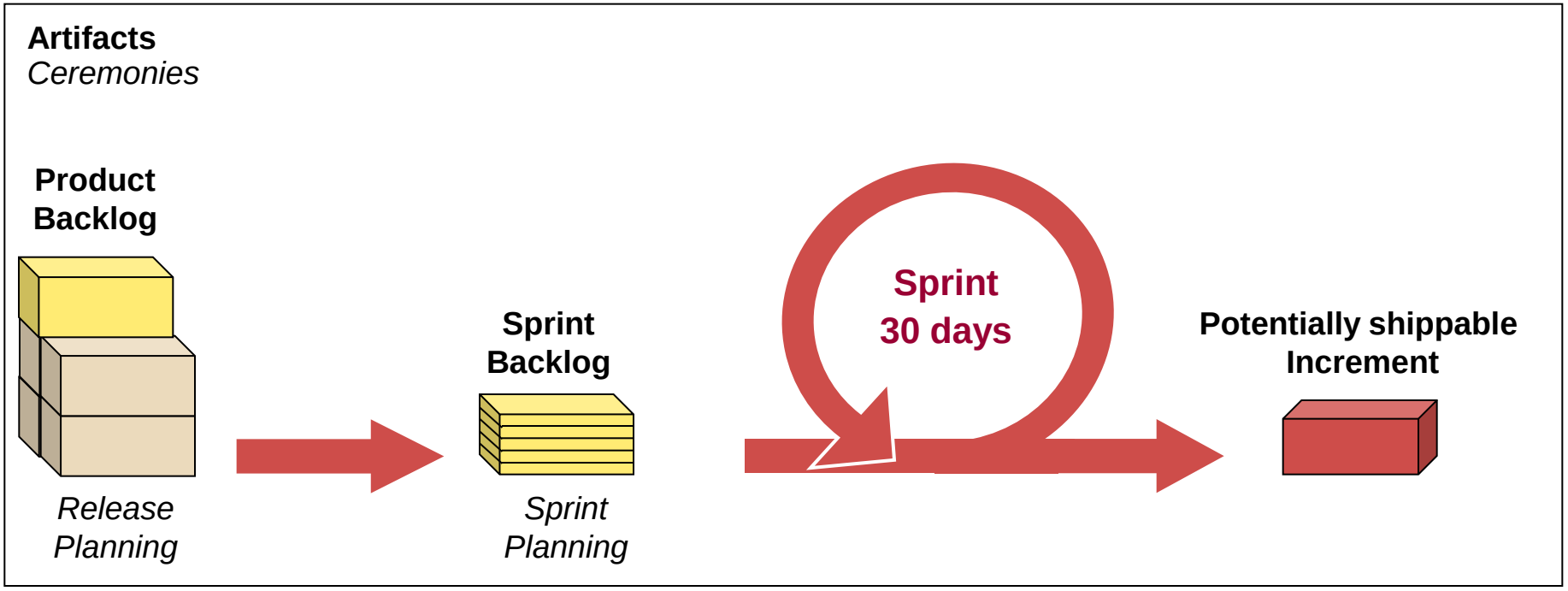


The Scrum Flow



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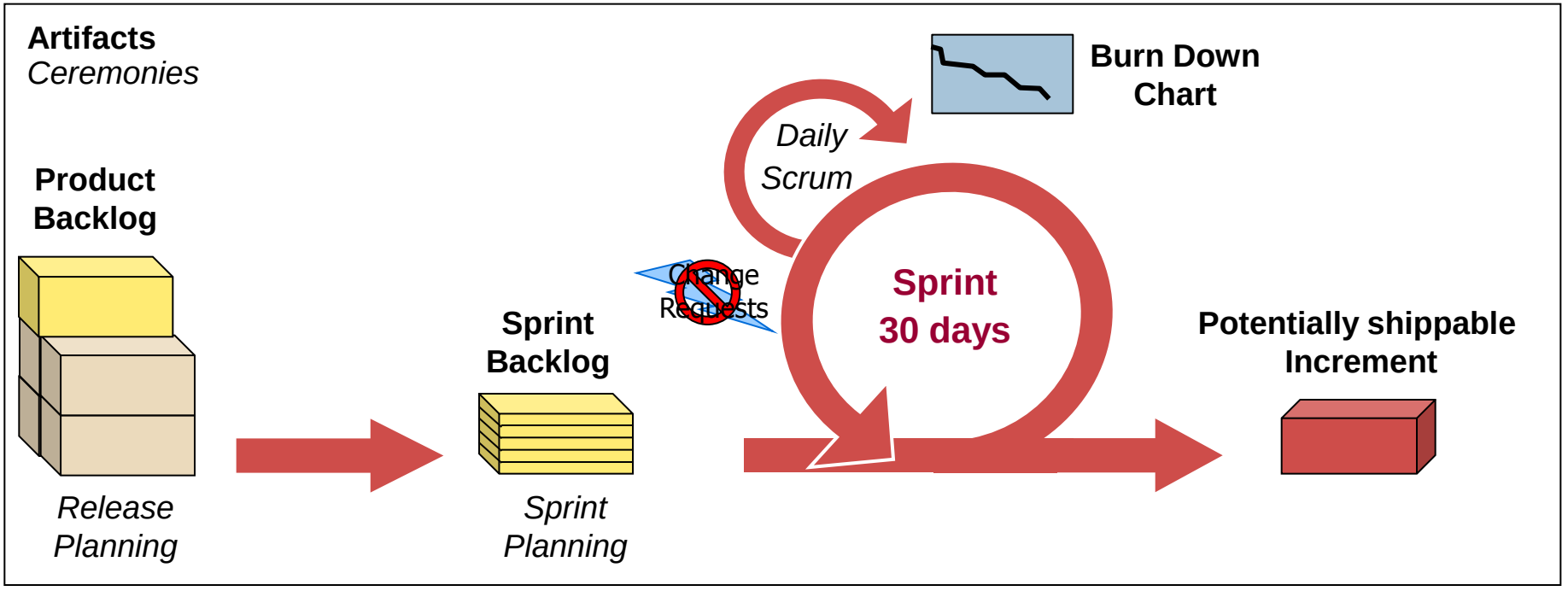
The Sprint transforms the requirements from the Backlog into running, tested and documented software

The Scrum Flow



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The Sprint transforms the requirements from the Backlog into running, tested and documented software

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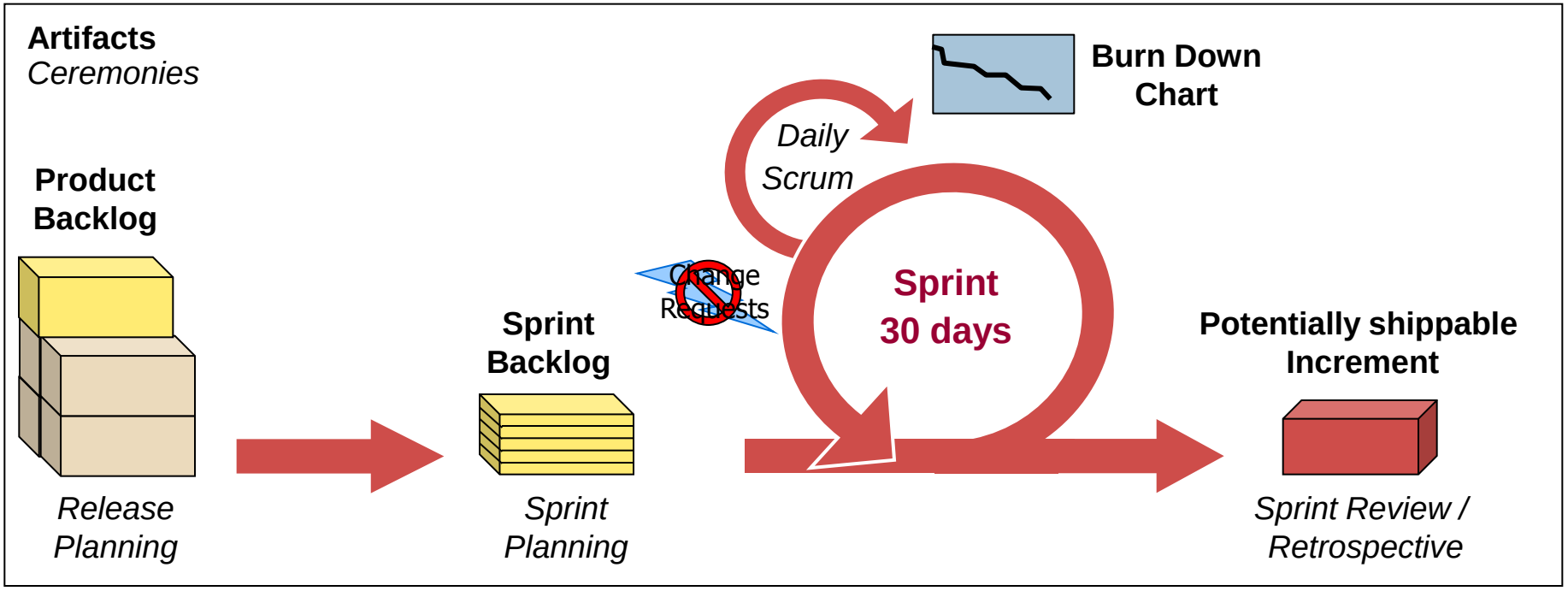

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Scrum Roles are divided into Chickens and Pigs

Two Types of Scrum Roles

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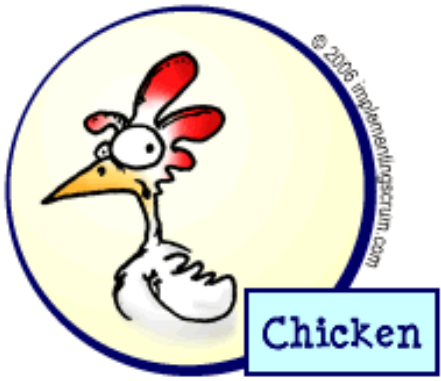
A Scrum team only consists of the developers, product owner, and ScrumMaster. Nobody else.



Team

- ***Commits to the delivery of the highest-priority features as defined by the Product Owner***
- ***Estimates how much they can deliver***
- ***Organize themselves: Ideally multifunctional and no fixed roles (sometimes not avoidable)***
- ***Typically 5-9 people***
- ***All necessary skills should be represented in the team: developers, UI designers, testers etc.***
- ***Organises itself and its work***
- ***Show demo to the Product Owner and stakeholders***

The **team decides** how much can be delivered

Source: http://www.swissict.ch/fileadmin/sekretariat/AG_FG/Lean_Agile_Scrum/Simon_und_Krishan_Scrum_101.pdf

Scrum Team vocabulary

Need the Courage to Say NO

There are No “white” lies

Need to know the Power of YES

There, Then, Them ->> Here, Now, Us

Dis-empowered, blame >> empowerment, self-mastery

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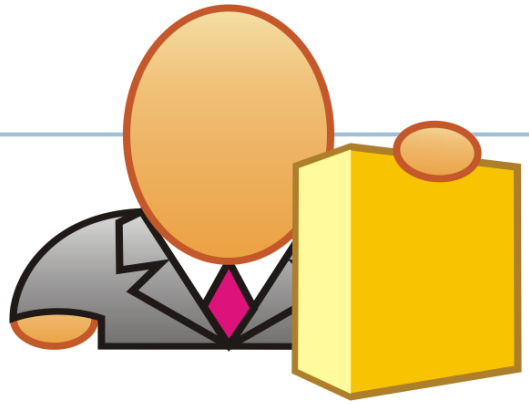
Product owner



Define the features of the product

Decide on release date and content

Be responsible for the profitability of the product (ROI)

Prioritize features according to market value

Adjust features and priority every iteration, as needed

Accept or reject work results

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The ScrumMaster

Represents management to the project

Responsible for enacting Scrum values and practices

Removes impediments

Ensure that the team is fully functional and productive

Enable close cooperation across all roles and functions

Shield the team from external interferences

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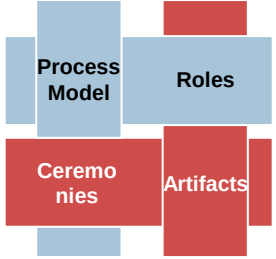
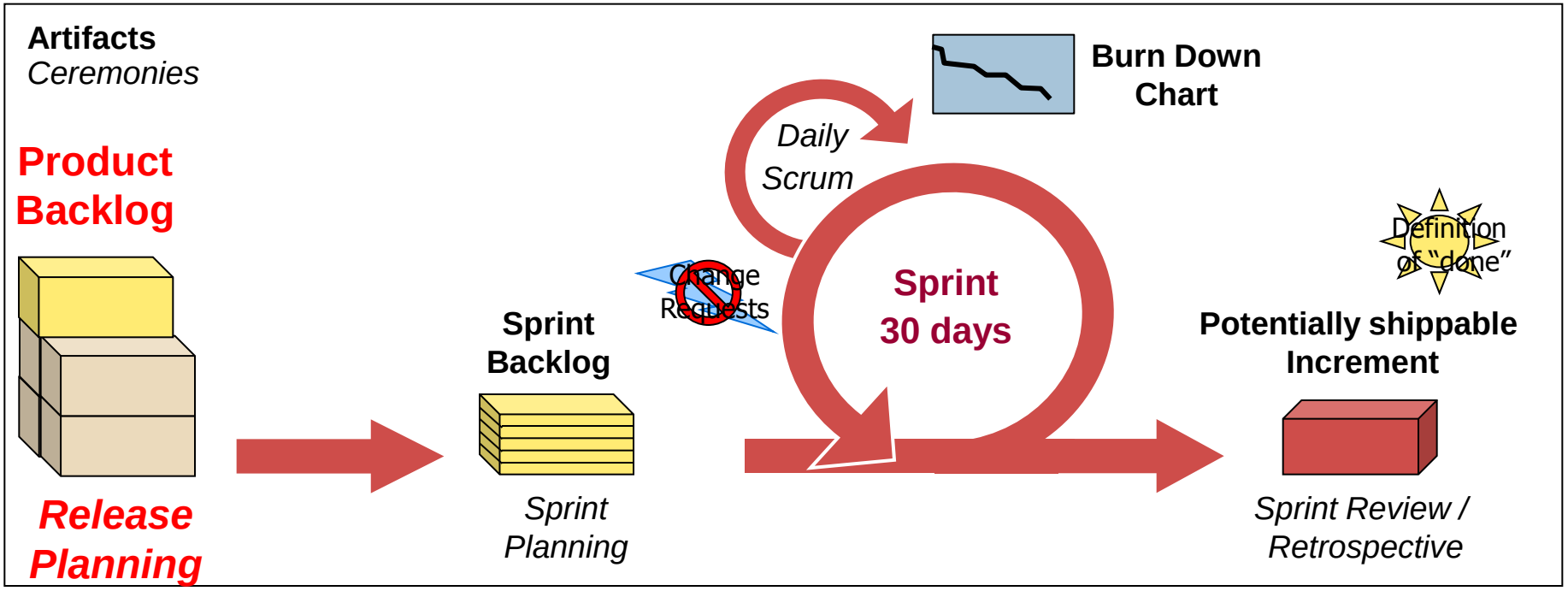
Release planning plans the scope and schedule of the release



The Product Backlog and Release Planning



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Product Backlog

- ***The requirements / features***
- ***A list of all desired work on the project***
- ***Ideally expressed such that each item has value to the users or customers of the product***
- ***Prioritized by the product owner***
- ***Reprioritized at the start of each sprint***

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Product backlog - example

PRODUCT BACKLOG (example)					
ID	**Name**	**Imp**	**Est**	**How to demo**	**Notes**
1	Deposit	30	5	Log in, open deposit page, deposit €10, go to my balance page and check that it has increased by €10.	Need a UML sequence diagram. No need to worry about encryption for now.
2	See your own transaction history	10	8	Log in, click on "transactions". Do a deposit. Go back to transactions, check that the new deposit shows up.	Use paging to avoid large DB queries. Design similar to view users page.

Source: Scrum&XP From The Trenches

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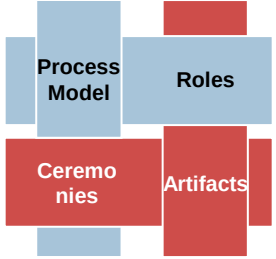
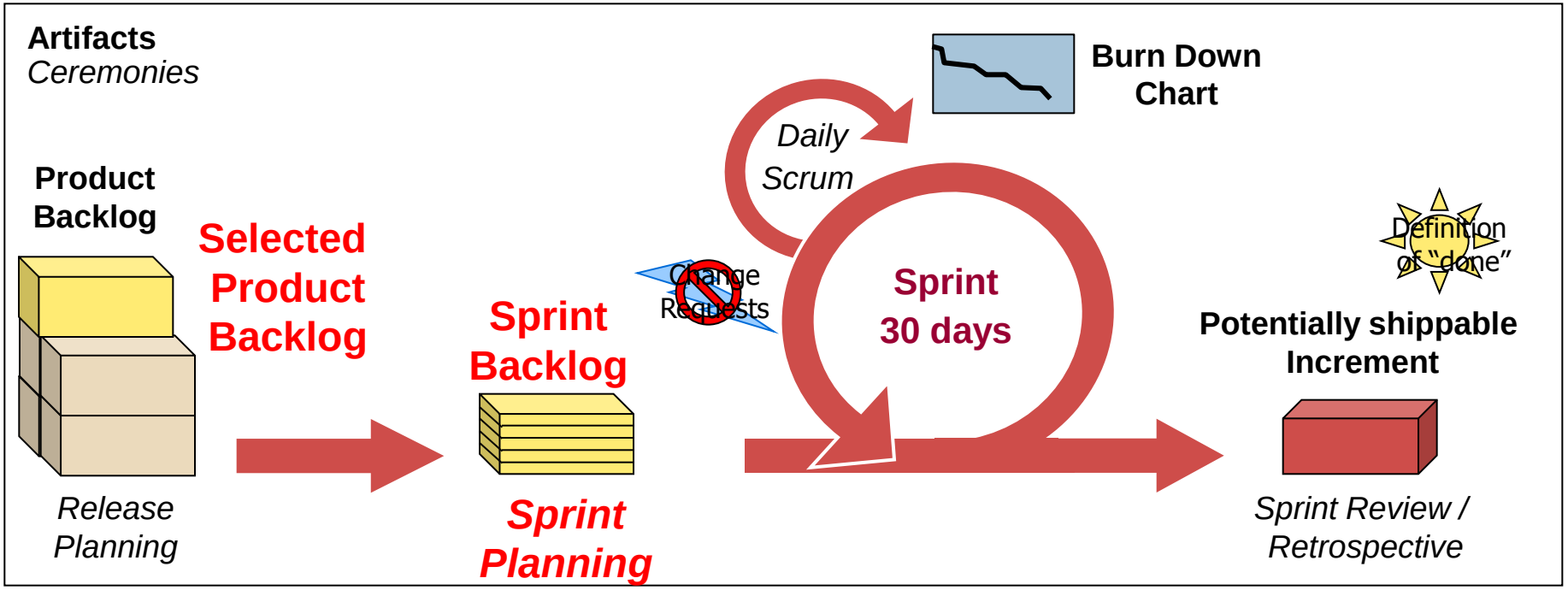
The Sprint Backlog is the central artifact for the Sprint Planning



The Sprint Backlog and Sprint Planning



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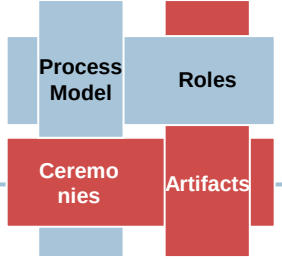
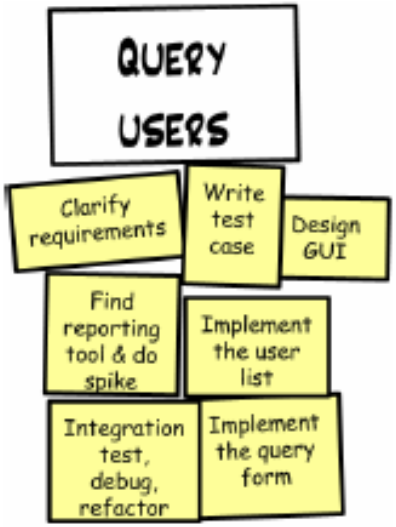
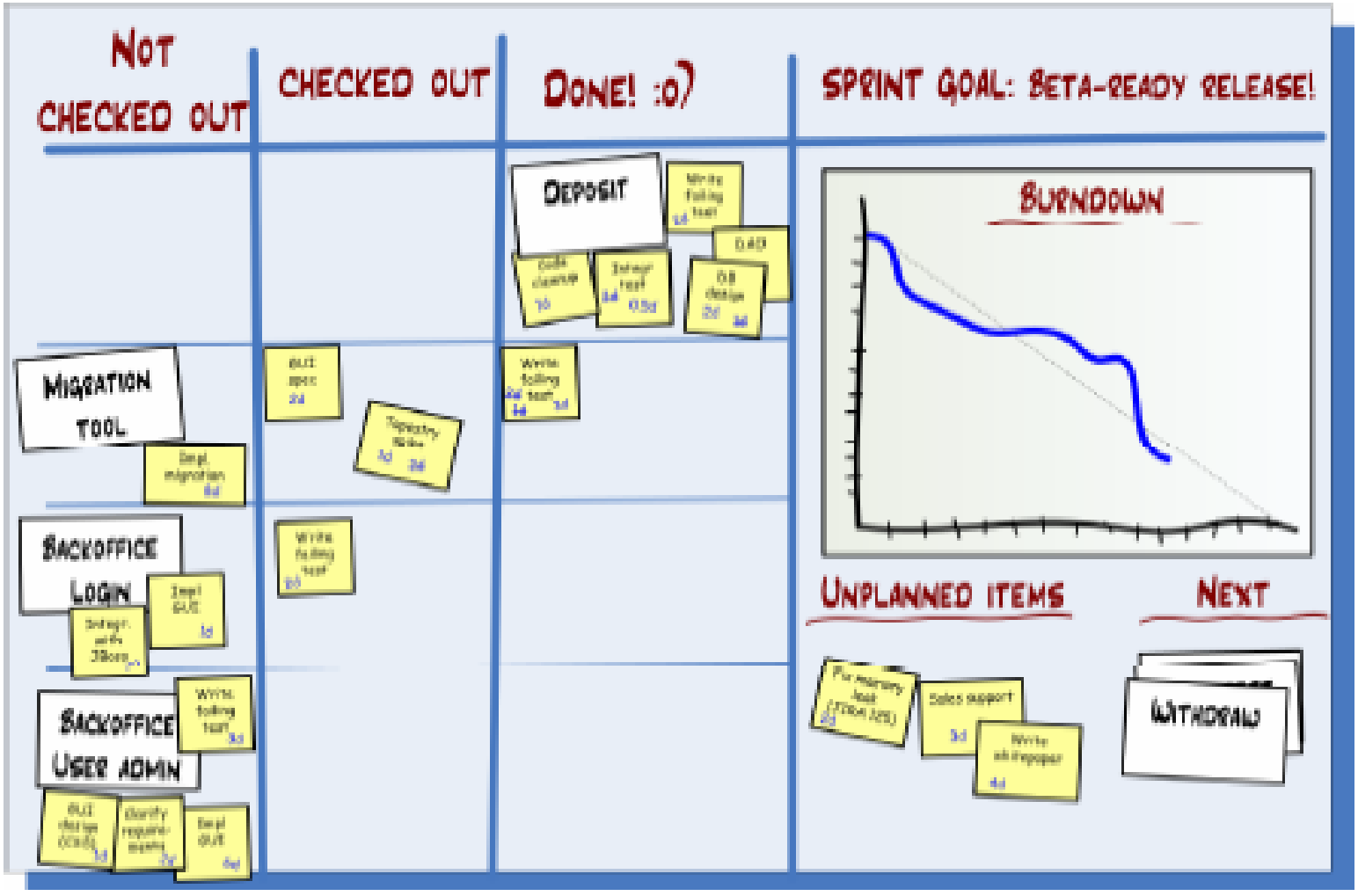


- A short term for the sprint, typically one-liner
  - “see transaction history”
- Declared by the Product Owner
- Accepted by the Team
- Broken down into tasks by the team



Scrum Board



Source: Henrik Kniberg, „Scrum&XP From The Trenches"

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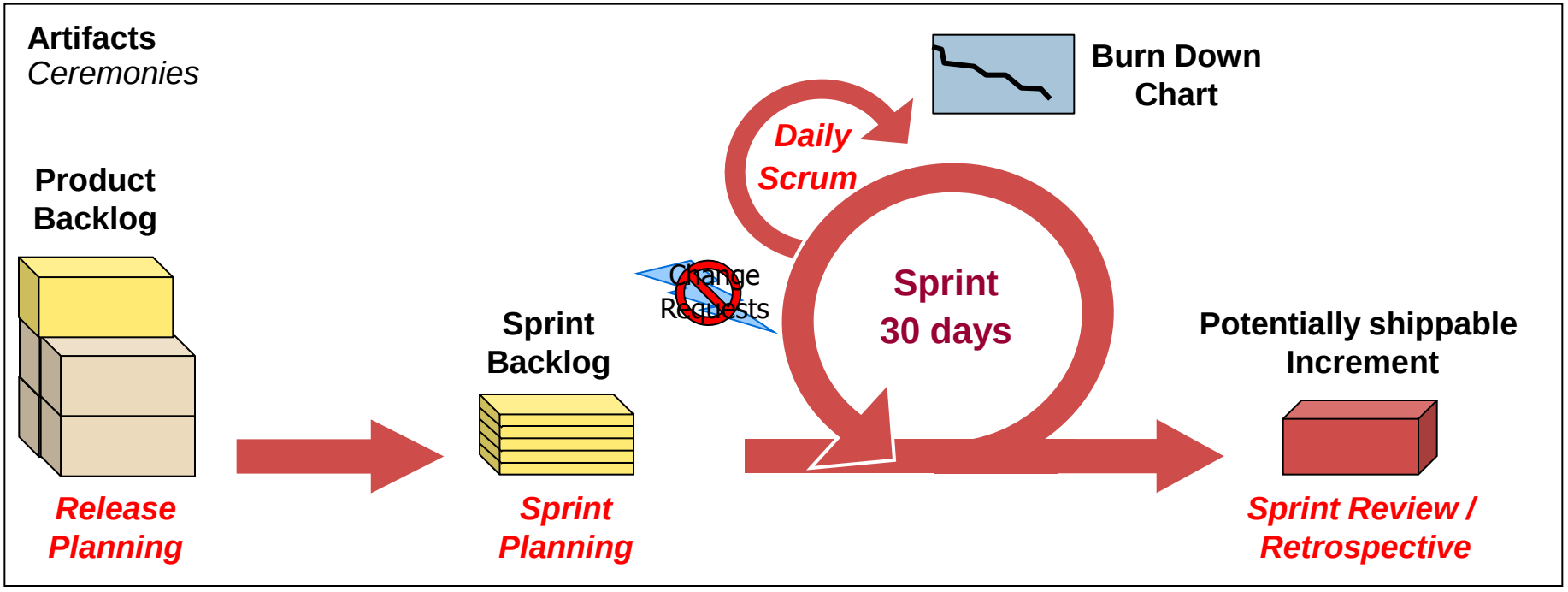

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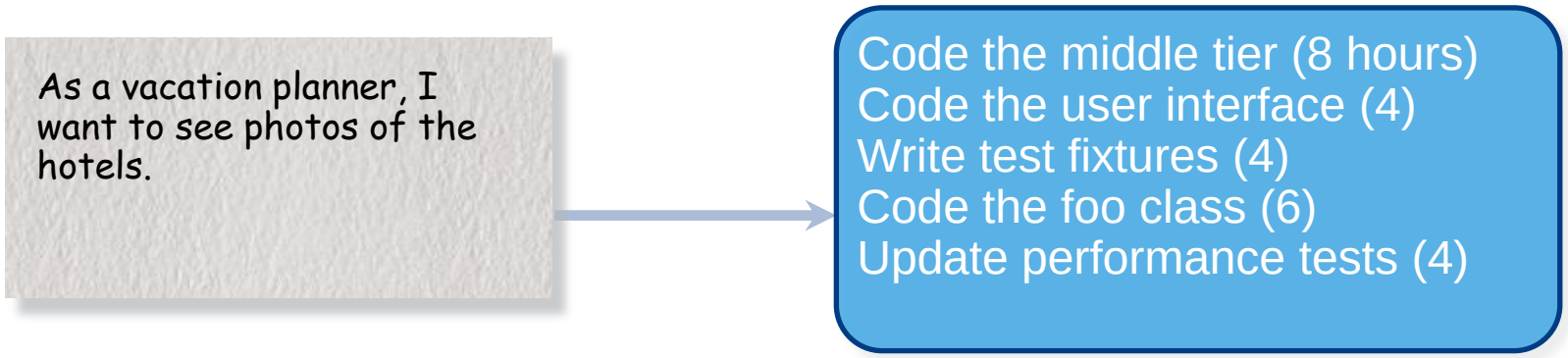
Sprint planning

1. *Team selects items from the product backlog they can commit to completing*
2. *Sprint backlog is created*
   - Tasks are identified and each is estimated (1-16 hours)
   - Collaboratively, not done alone by the ScrumMaster
3. *High-level design is considered*



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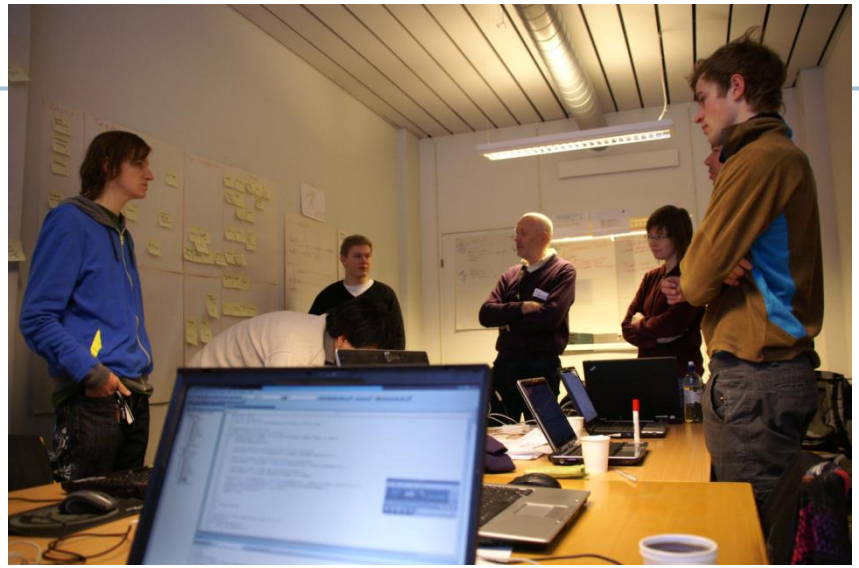
The Daily Scrum



Source: http://iptrondheim2010.wordpress.com/2010/03/03/day-16-scrum/

Parameters

Daily

Time-boxed: 15-minutes

Stand-up

Not for problem solving

Whole world is invited

Only team members, ScrumMaster, product owner, can talk

Helps avoid other unnecessary meetings

M&Ms

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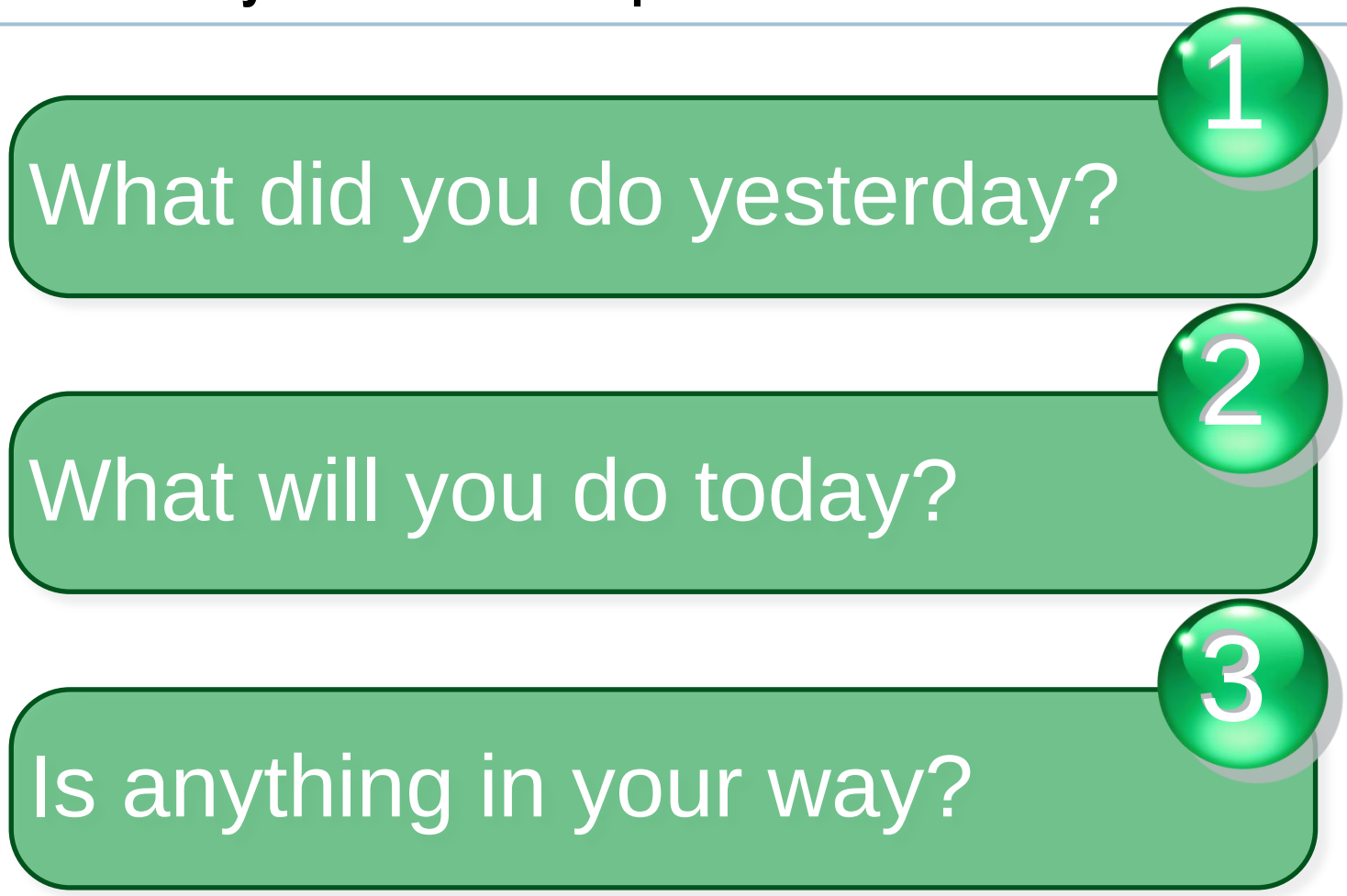
Daily Scrum: Everyone answers 3 questions



Also:

- Did I learn anything worth sharing?
- How can we all together improve?

They are not statuses to ScrumMaster.
They are commitments in front of peers.

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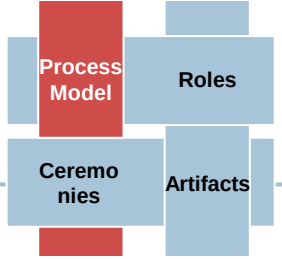
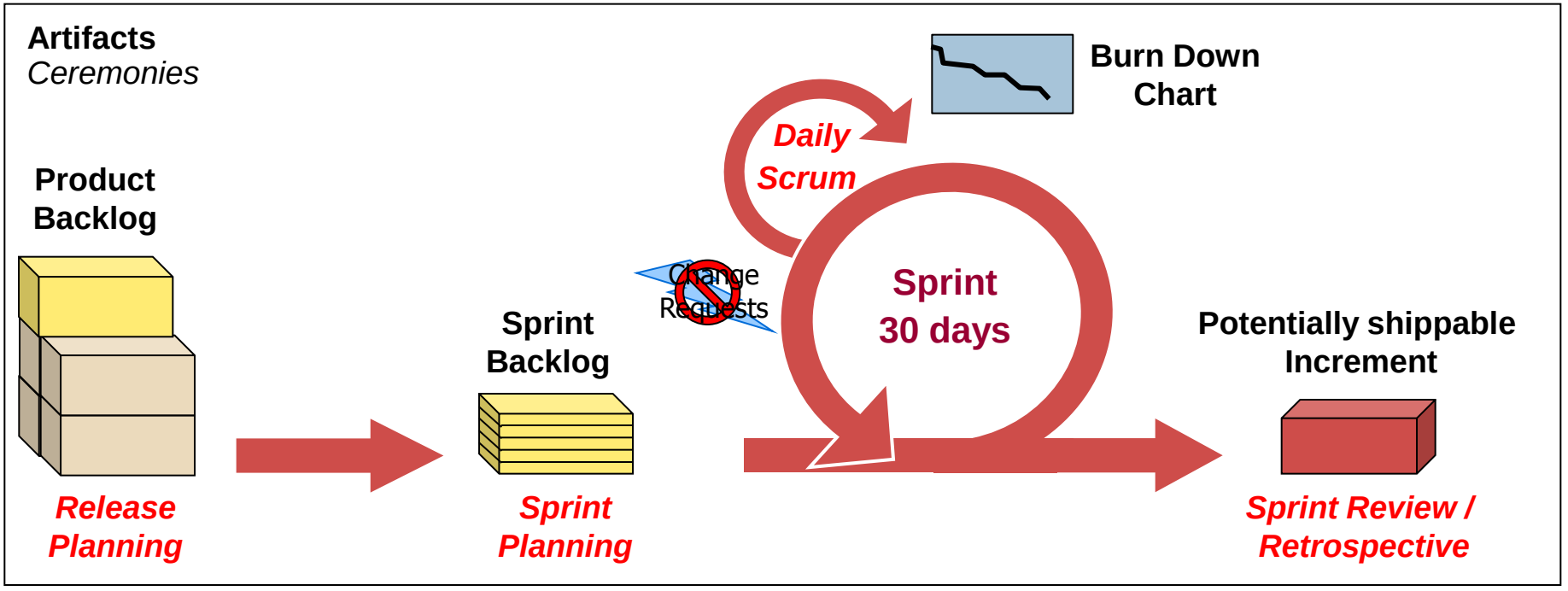
The Sprint transforms the requirements from the Backlog into running, tested and documented software



The Scrum Flow



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The sprint review

- ***Team presents what it accomplished during the sprint***
- ***Typically takes the form of a demo of new features or underlying architecture***
- ***Informal***
  - 2-hour prep time rule
  - No slides
- ***Whole team participates***
- ***Invite the world***

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Sprint retrospective

- ***Periodically take a look at what is and is not working***
- ***Done after every sprint***
- ***Whole team participates***
  - ScrumMaster
  - Product owner
  - Team
  - Possibly customers and others

Picture source: http://navneetjha.hubpages.com/hub/SCRUM-Methodology-A-Overview

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Sprint retrospective: Start / Stop / Continue

Whole team gathers and discusses what they'd like to:

Start doing

Stop doing

Continue doing

Remember**: inspect and adapt** is **the key feature** of Scrum

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Scrum in 100 words

- ***Scrum is a project management method (framework ☺) for software development***
- ***Scrum is an agile process that allows us to focus on delivering the highest business value in the shortest time.***
- ***It allows us to rapidly and repeatedly inspect actual working software (every two weeks to one month).***
- ***The business sets the priorities. Teams self-organize to determine the best way to deliver the highest priority features.***
- ***Every two weeks to a month anyone can see real working software and decide to release it as is or continue to enhance it for another sprint.***

Source: mountaingoatsoftware.com

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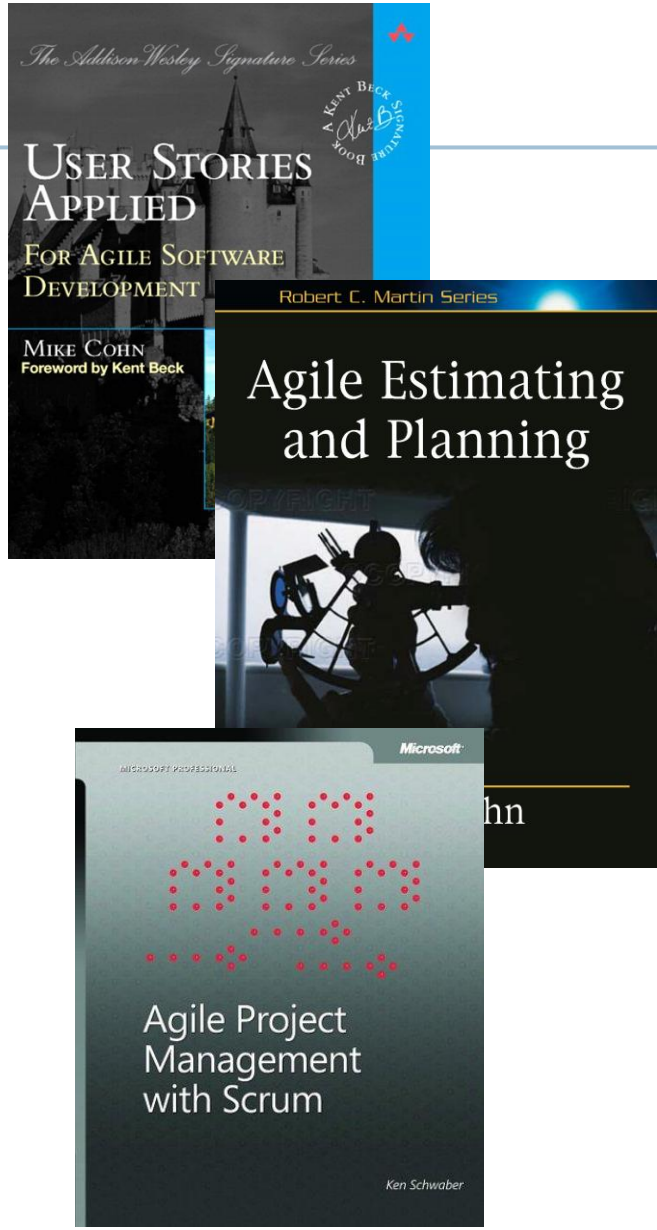
A Scrum reading list

- ***Official Scrum Guide: http://www.scrum.org/scrumguides***
- *Agile Estimating and Planning by Mike Cohn*
- *Agile Project Management with Scrum by Ken Schwaber*
- *Agile Retrospectives by Esther Derby and Diana Larsen*
- *Agile Software Development Ecosystems by Jim Highsmith*
- *Agile Software Development with Scrum by Ken Schwaber and Mike Beedle*
- *Scrum and The Enterprise by Ken Schwaber*
- *User Stories Applied for Agile Software Development by Mike Cohn*
- *Lots of weekly articles at www.scrumalliance.org*



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Sources and references

1. *Mike Cohn, Redistibutable intro to scrum, www.mountaingoatsoftware.com*
2. *Martine Devos, Scrum Master course*
3. *Henrik Kniberg, "Scrum and XP from the Trenches”*
4. *Agile with Scrum, Wrocław Agile Community*
5. *Official Scrum Guide, http://www.scrum.org/scrumguides*

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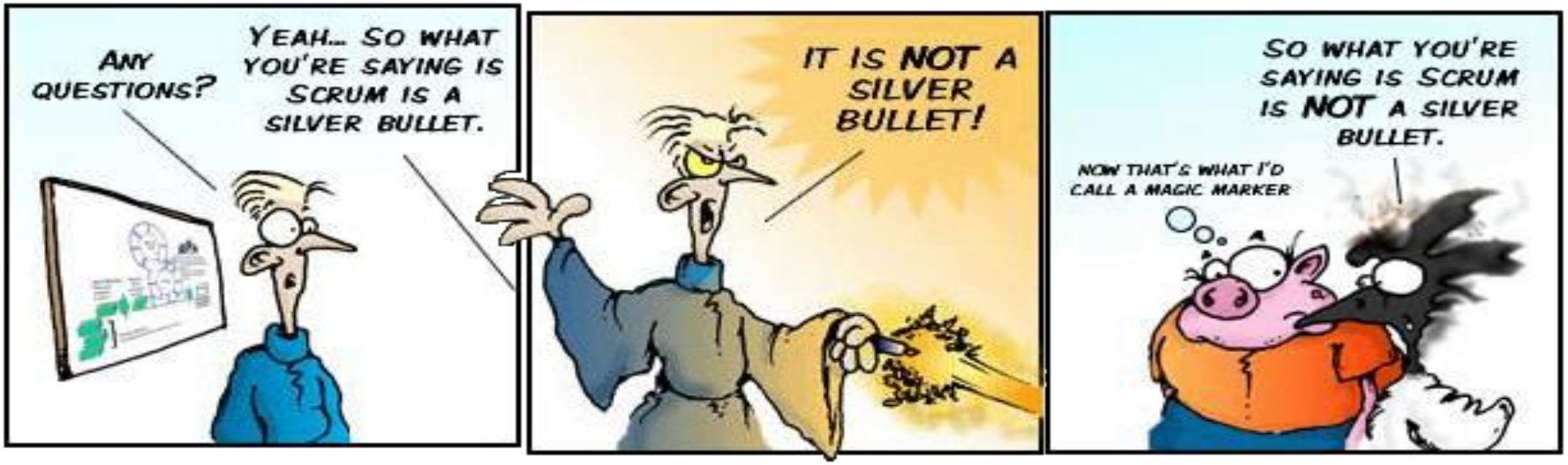
Q&A



Tony D. Clark, © 2006 implementingscrum.com

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Vielen Dank für Ihre Aufmerksamkeit!