

Status Quo of Agile

New Perspectives with Scrum and Kanban

Agile PM-Day @ Bayer

2012-11-13, Monheim - Germany

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Scrum

BBC

YAHOO!

PHILIPS

océ

SAP

JOHN DEERE

nielsen

TURNER
A TimeWarner Company

HIGH MOON STUDIOS®

software AG

CapitalOne™

SIEMENS

LexisNexis®

Deutsche Telekom

NOKIA

LOCKHEED MARTIN

bmcsoftware

1&1

IMMOBILIEN
SCOUT24

intuit.



Johnson Controls



Microsoft®

TIPSWITCH

Google™

TimeWarner

EA

ELECTRONIC ARTS™

Why Are Agile Methods Successful?

3 things we wish were true...

- The customer knows what he wants
- The team knows how to build it
- Nothing will change along the way



3 things we have to live with...

- The customer discovers what he wants
- The team discovers how to build it
- Many things change along the way

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

Mike Beedle

Arie van Bennekum

Alistair Cockburn

Ward Cunningham

Martin Fowler

James Grenning

Jim Highsmith

Andrew Hunt

Ron Jeffries

Jon Kern

Brian Marick

Robert C. Martin

Steve Mellor

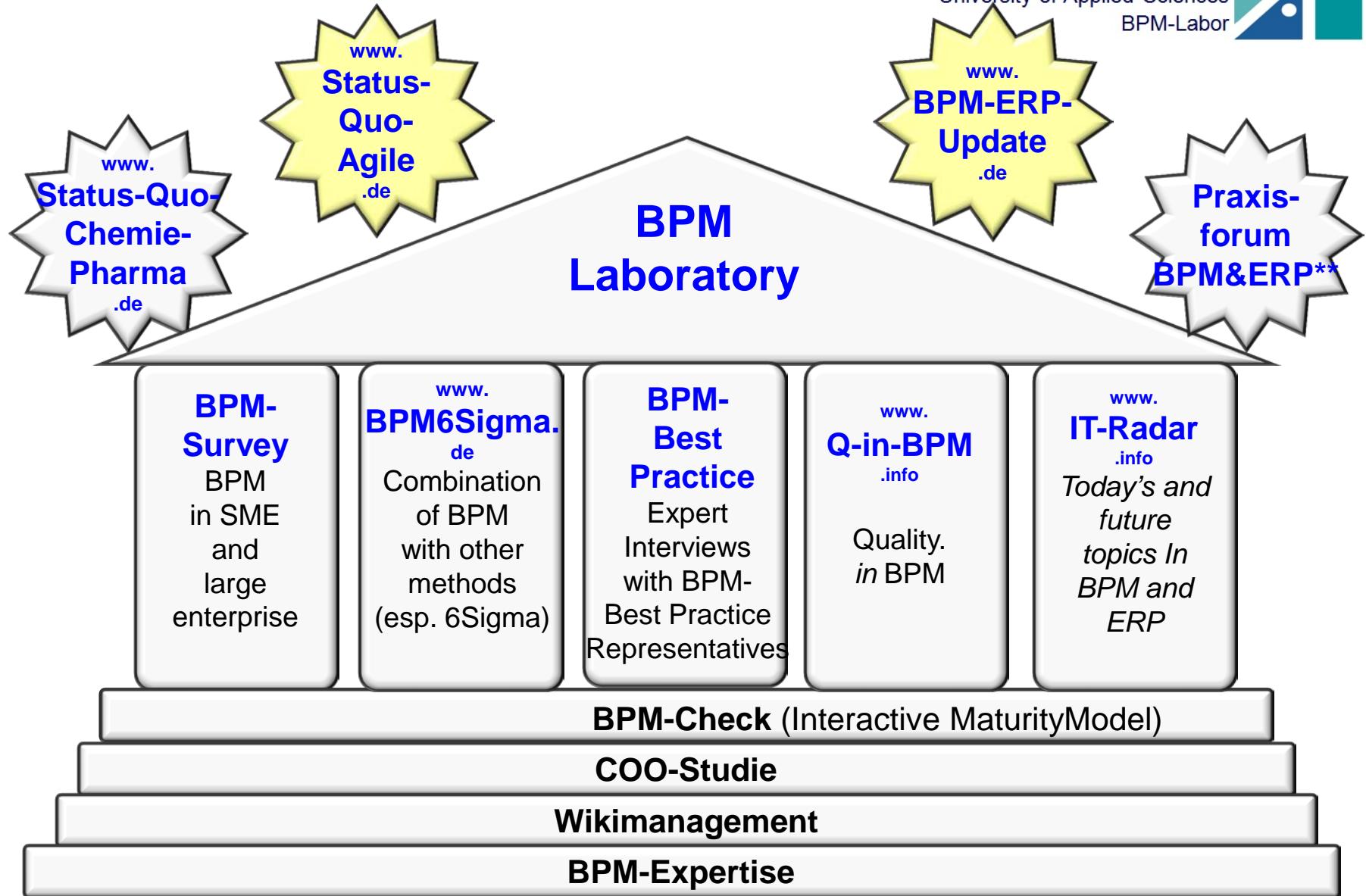
Ken Schwaber

Jeff Sutherland

Dave Thomas

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Prof Dr. Ayelt Komus
Hochschule Koblenz
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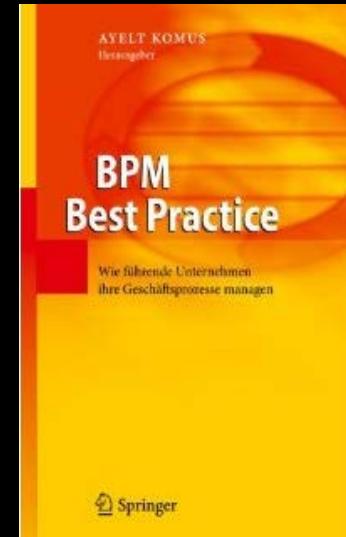
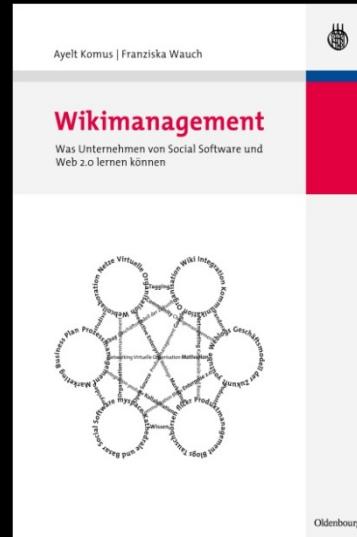
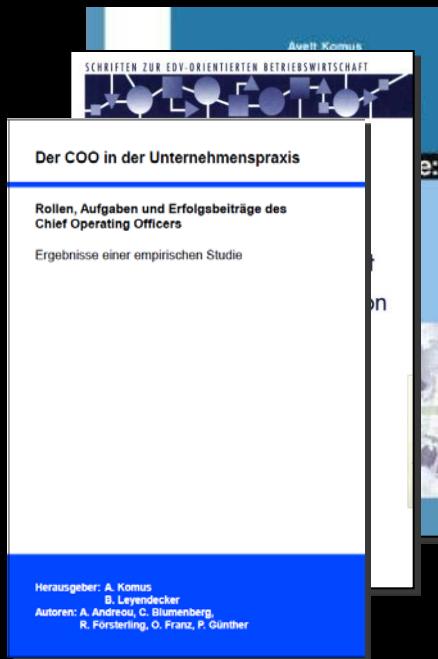


* BPM: Business Process Management

** www.bpmerp.de

*** Workshops/Trainings

Books

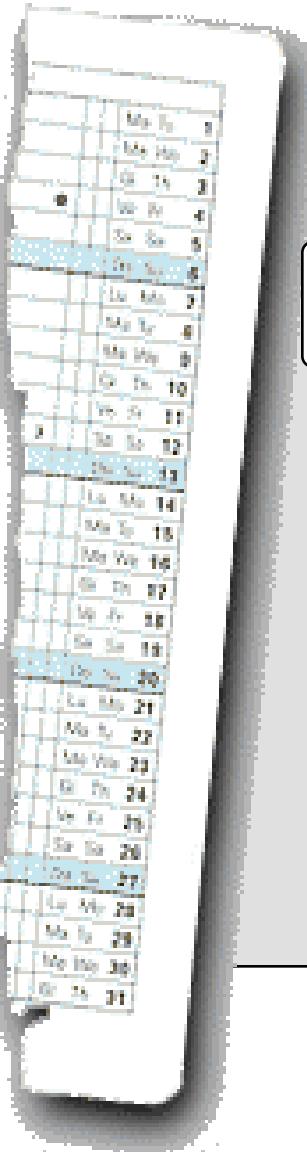


*What are success factors of Wikipedia and other social media systems to learn from in the field of BPM?
How to use Social Media in the organization?*

*What does the BPM of BPM-Best-Practice-Companies look like?
BPM-Success Factors of Deutsche Bank, Miles & More, Bayer, Generali and many other*

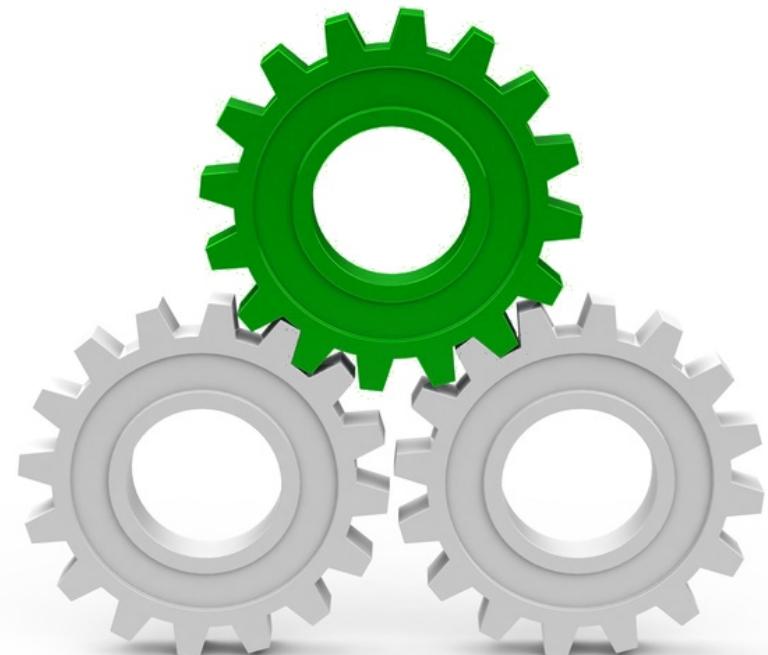
Other Publications: www.komus.de/publikation

Agenda

- 
- Results: “Status Quo Agile”**
 - Agile Methods Outside Software-Development**
 - Agile Methods In The Regulated Environment**
 - Lean Manufacturing And Agile**
 - Agile Transition – Challenges and Opportunities**

Study „Status Quo Agile“

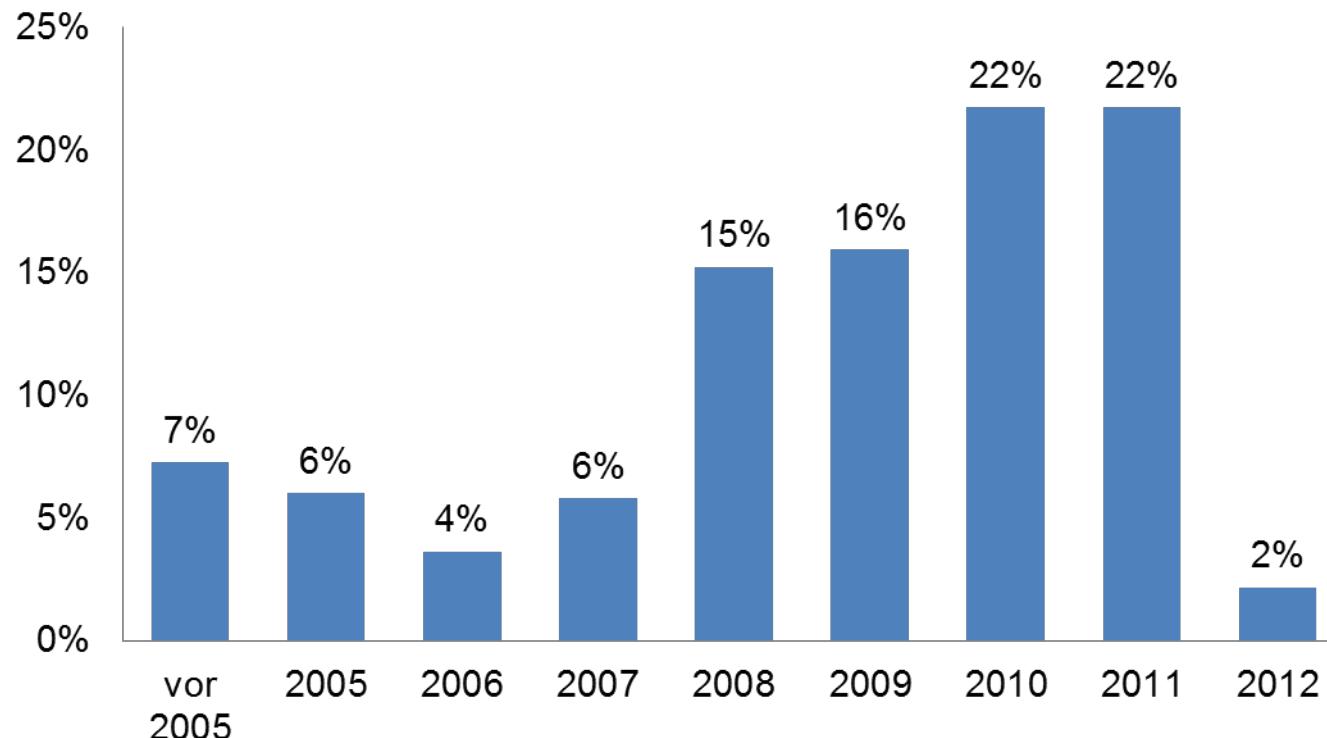
- Study on common practices and use of agile methods
- Expert interviews and online-survey
- Survey period Q2 2012
- 350 participants, 266 fully usable questionnaires
- Participants gained via mailings, press releases, social networks, twitter
- Articles in > 20 magazines, blogs etc.



Introduction Of Agile Methods

Usage of agile methods experienced a significant upswing since 2008

When did you start to use agile methods?



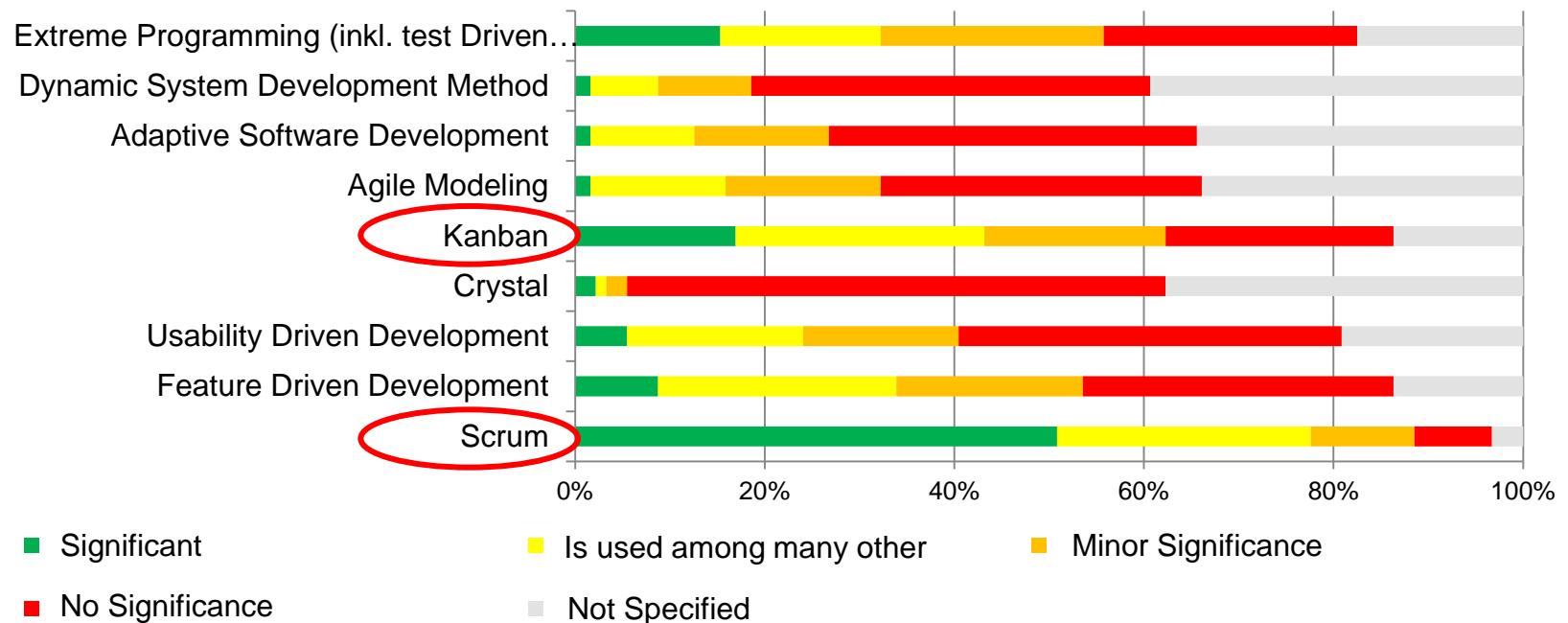
n=138 (Responses from the Groups „Consistently Agile“, „Mixed form“ und „as well as“); Date of survey: Q2-2012)

Source: Study Status Quo Agile

Most Popular Methods

Most popular agile methods: Scrum, Kanban, Extreme Programming

... importance of this method to your business...

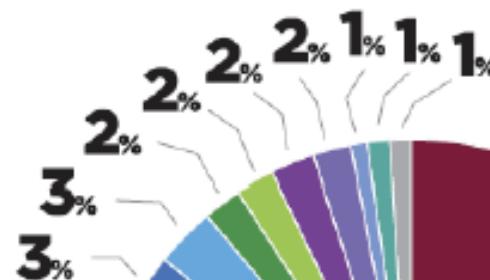


n=183; (Responses from the Groups „Consistently Agile“, „Mixed form“ und „as well as“)

Source: Study Status Quo Agile

www.status-quo-agile.de

„Market Share“ of Agile Methodologies



AGILE METHODOLOGY USED

Scrum or Scrum variants continue to make up more than two-thirds of the methodologies being used, while Kanban has entered the scene this year as a meager player. The only category that saw growth this year was Custom Hybrids (9% up from 5%).

- Scrum
- Scrum/XP Hybrid
- Custom Hybrid
- Don't Know
- Kanban
- Scrumban
- Feature-Driven Development
- Extreme Programming XP
- Lean
- Other
- Agile Unified Process (AgileUP)
- Agile Modeling
- Dynamic Systems Development Method

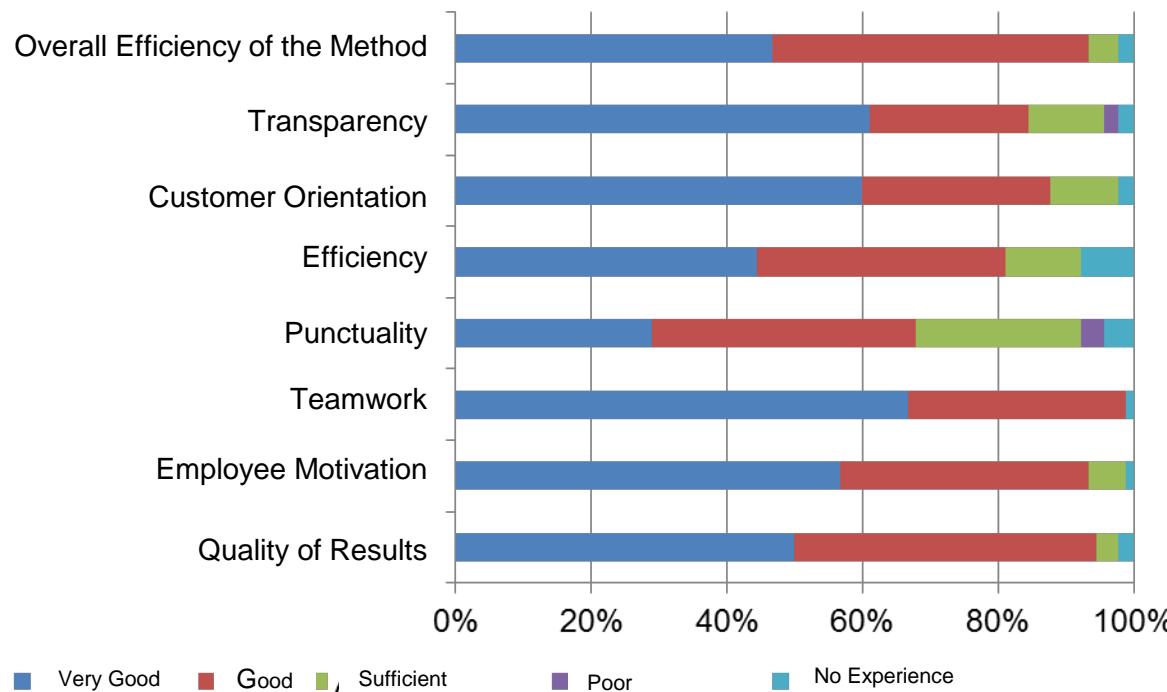
Source: http://www.versionone.com/pdf/2012_State_of_Agile_Development_Survey_Results.pdf

Extracted from: Agile Management with Scrum - Thomas.Klingenber@t2informatik.de

Satisfaction With Scrum

- 93% of “Agile Enterprises” rate Scrum to be “good” or “very good”
- Also excellent teamwork, motivation and quality of results

Please rate scrum ... based on the experience ...

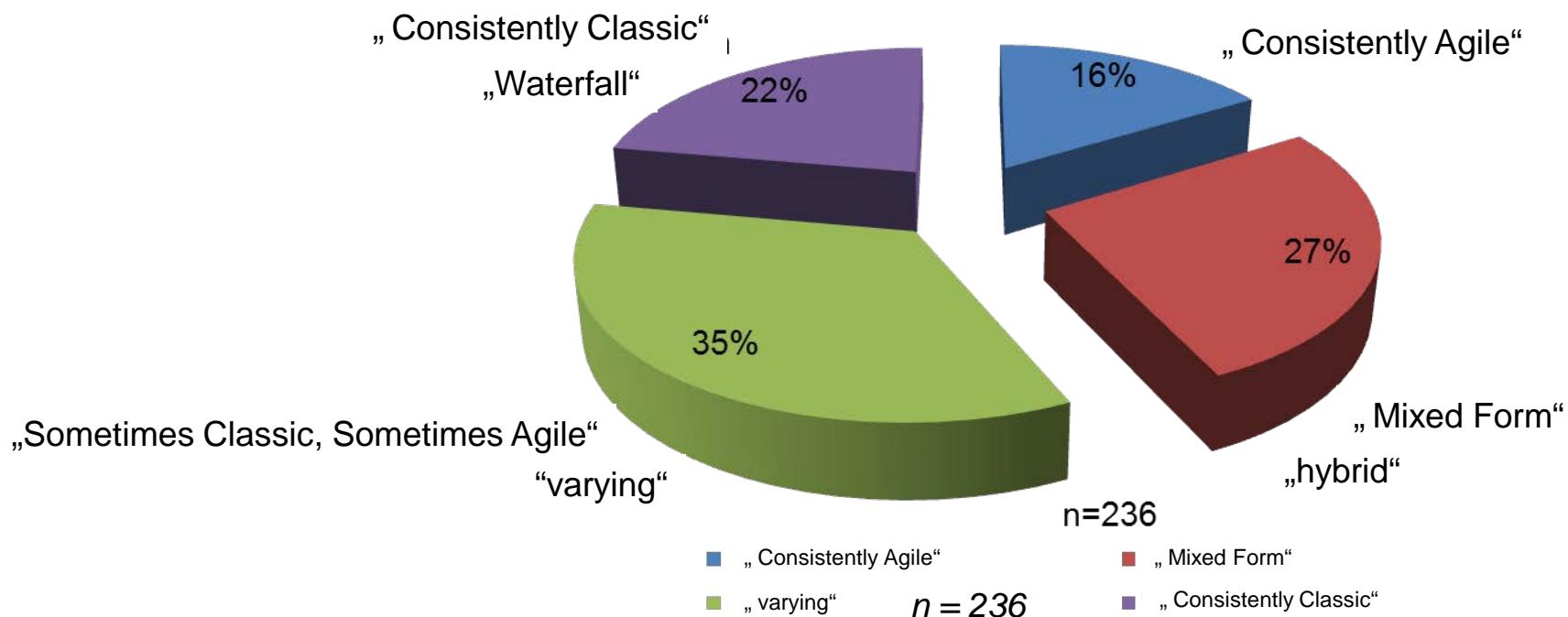


n=90 ((Responses from the Groups „Consistently Agile“, „Mixed form“ und „as well as“)

Variants Of Agile Methods

- The consistent use of agile methods is the exception
- Hybrid and occasional use stand for 62% of the sample

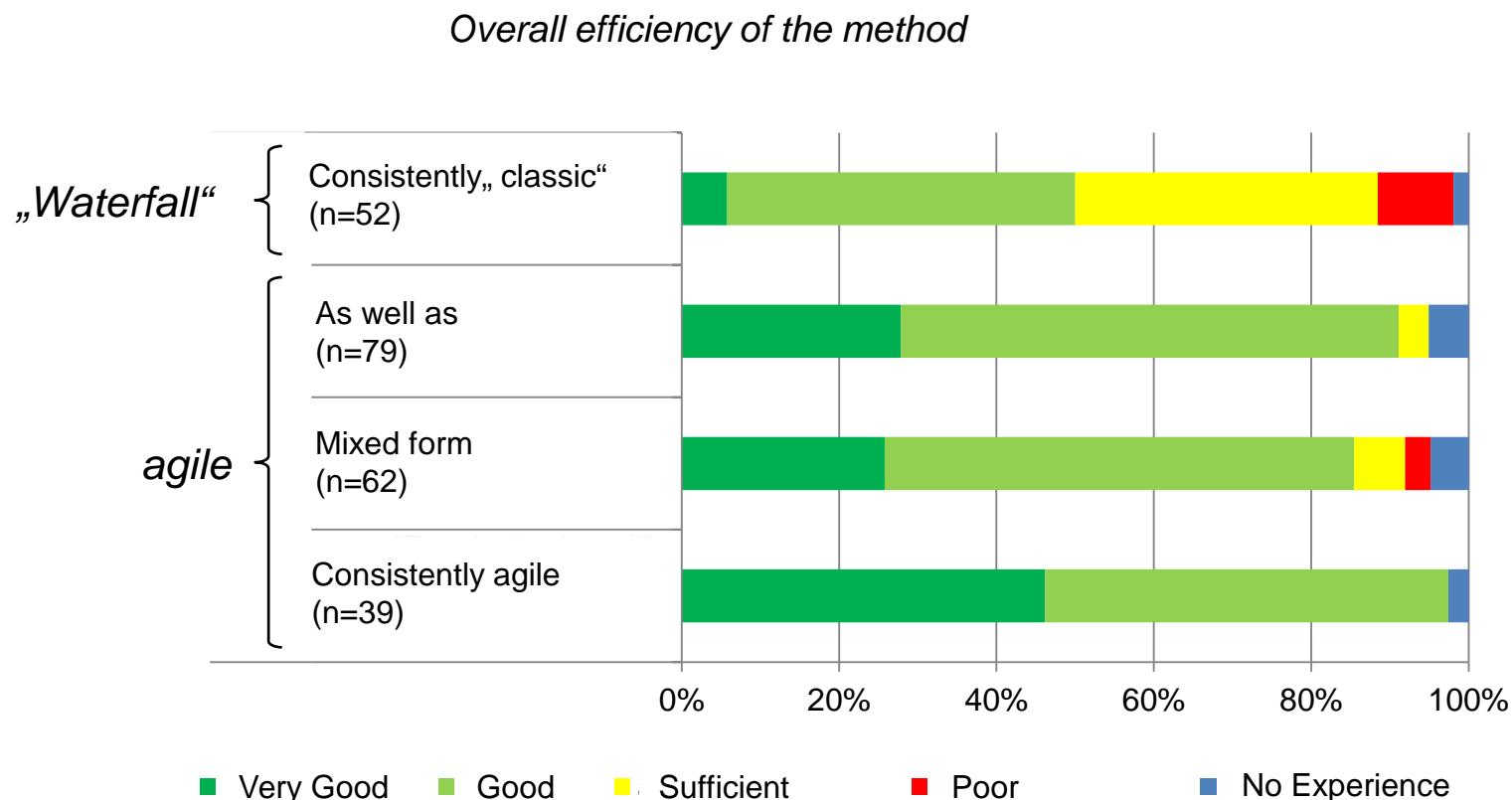
How are you using agile methods?



Source: Study Status Quo Agile

Evaluation Of Efficiency

User of agile methods evaluate the performance of their methods very positive



Source: Study Status Quo Agile

www.status-quo-agile.de

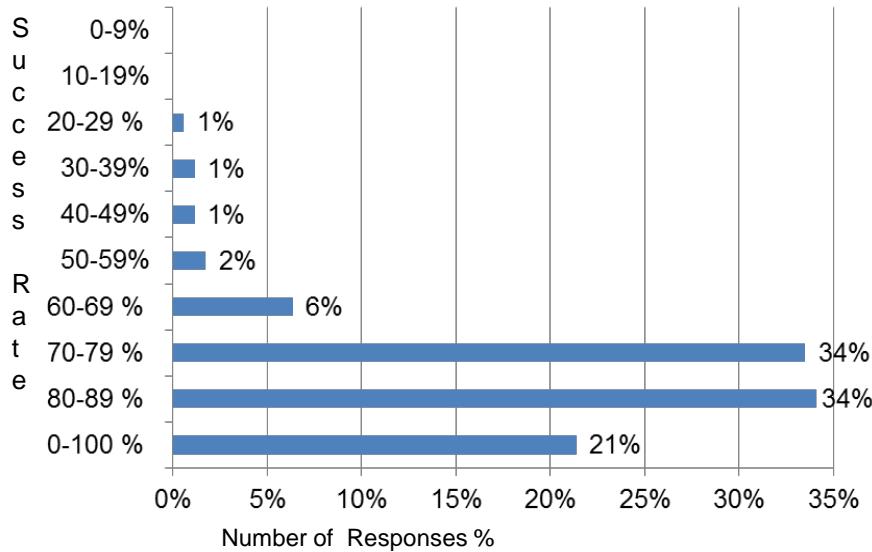
Success: Agile Versus Waterfall

The success rates for agile activities are rated significantly better

How do you assess ... sucess rate?

Agile Methods

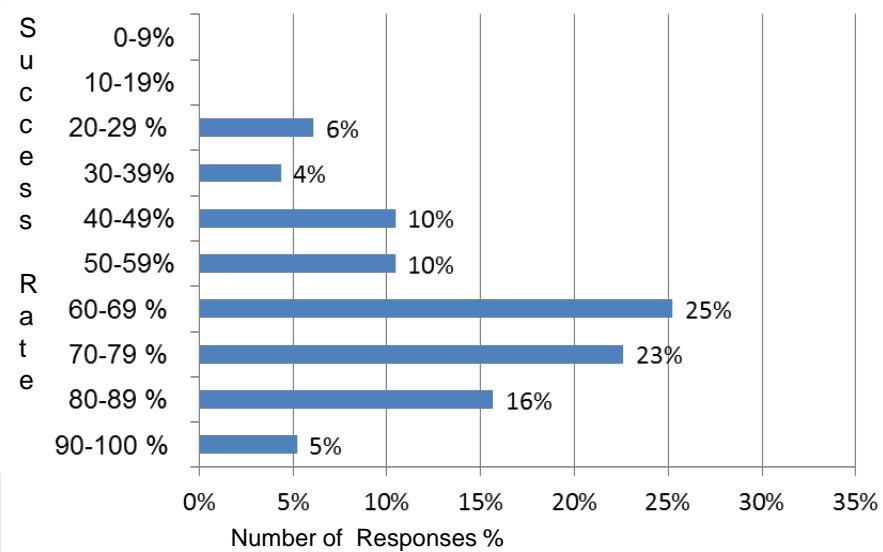
(Average between 76 and 85%)



n=173 (Responses from the Groups „Consistently Agile“, „Mixed form“ und „as well as“)

Waterfall

(Averag between 60 and 69%)

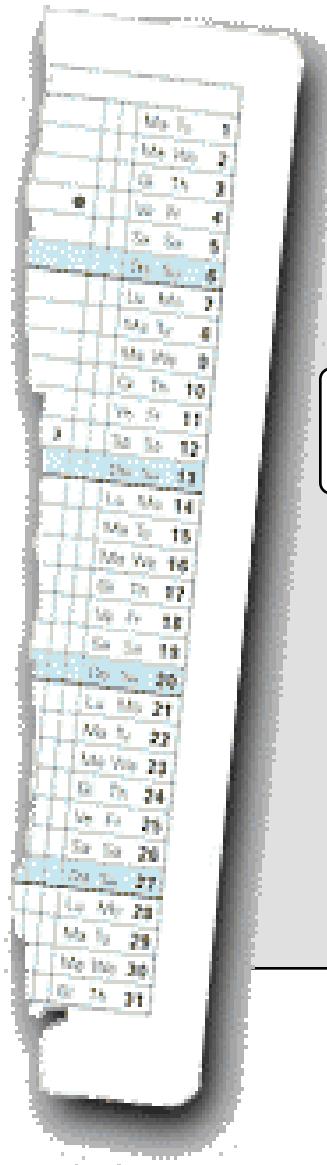


n=115 (Responses from the Groups „Consistently Agile“, „Mixed form“ und „as well as“)

Source: Study Status Quo Agile

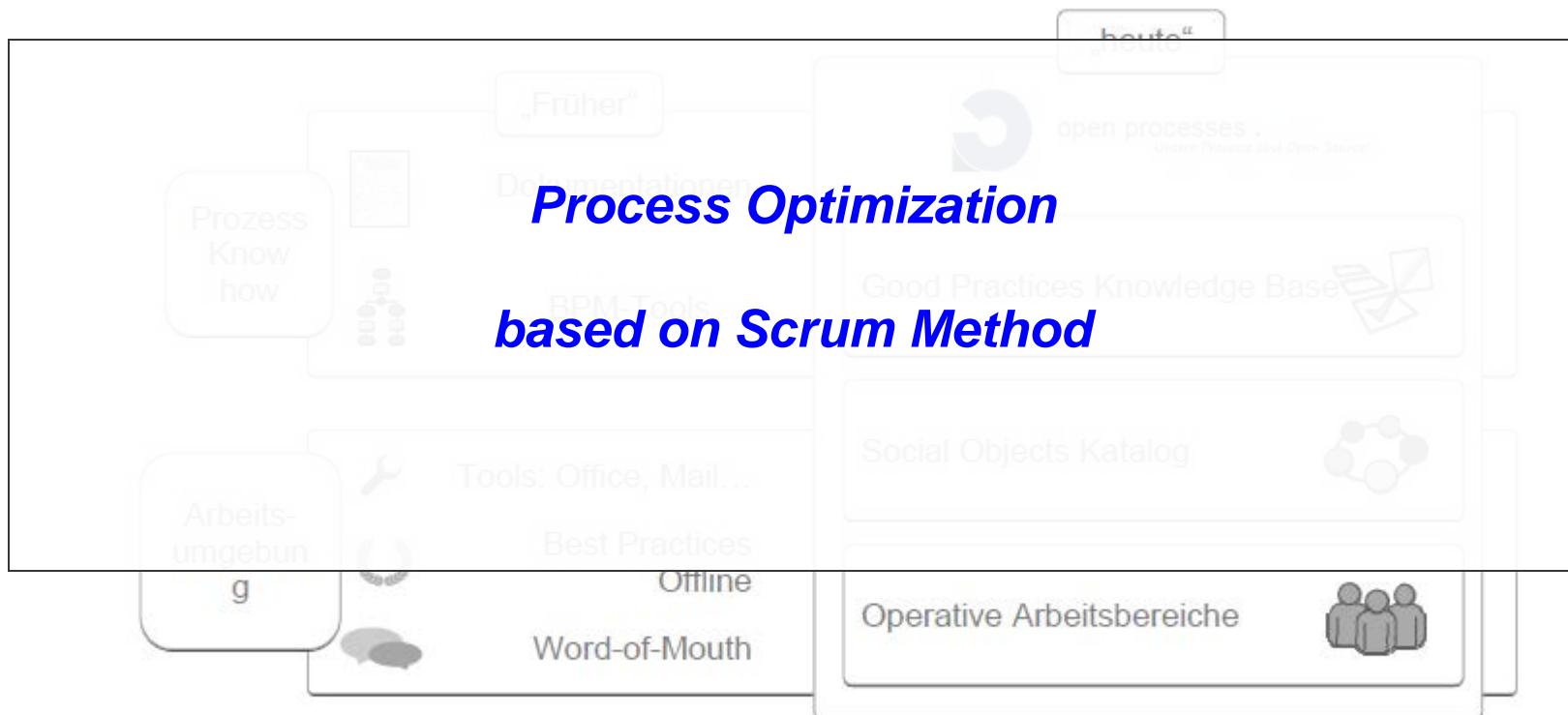
www.status-quo-agile.de

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Example: Open Processes – Deutsche Telekom

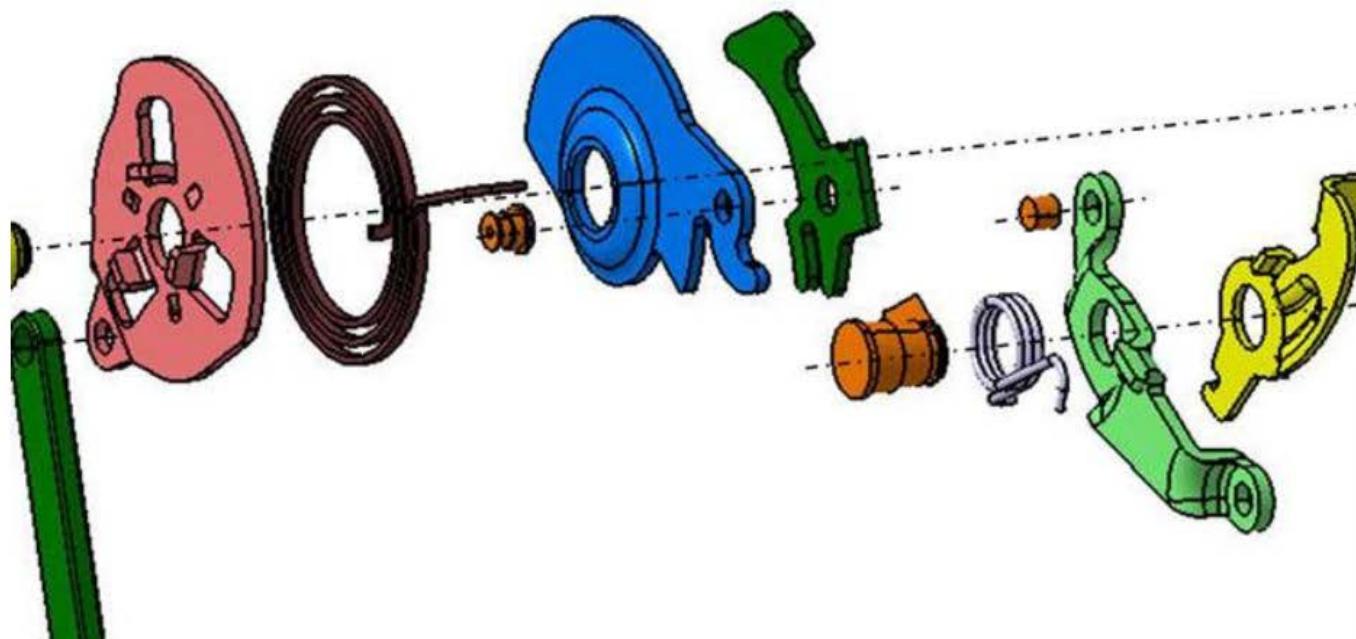


...T... www.komus.de [@AyeltKomus](https://twitter.com/AyeltKomus)

Sucessful Scrum – Not Limited to IT-Development!

Source: Erretkamps, Heinz; Yon, Gregory: Agile Product Development at Johnson Controls Automotive Experience – A Success Story, Scrum Gathering, Barcelona Oct. 2012. http://www.scrumalliance.org/system/slides/119/original/ClosingKeynote_HeinzErretkamps&GregoryYon_AgileMechanicalProductDevelopment.pdf?1349825029

Mechanism Parts

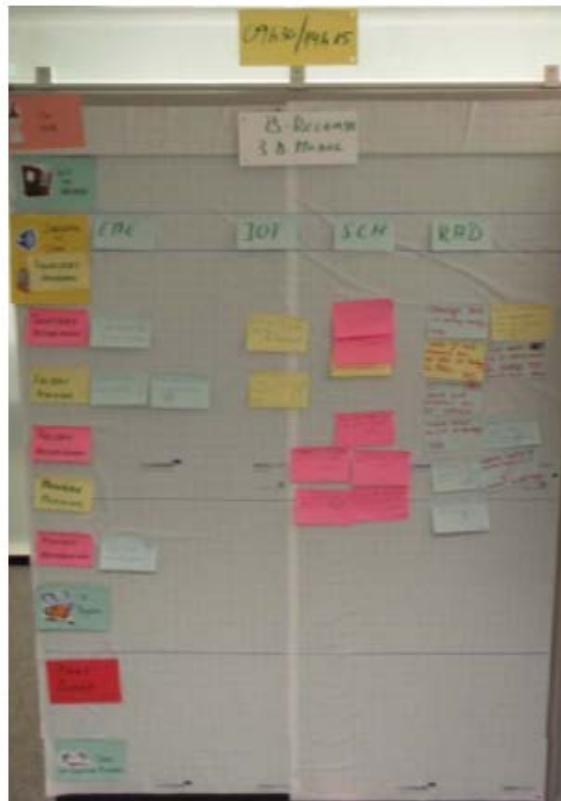


CAD System

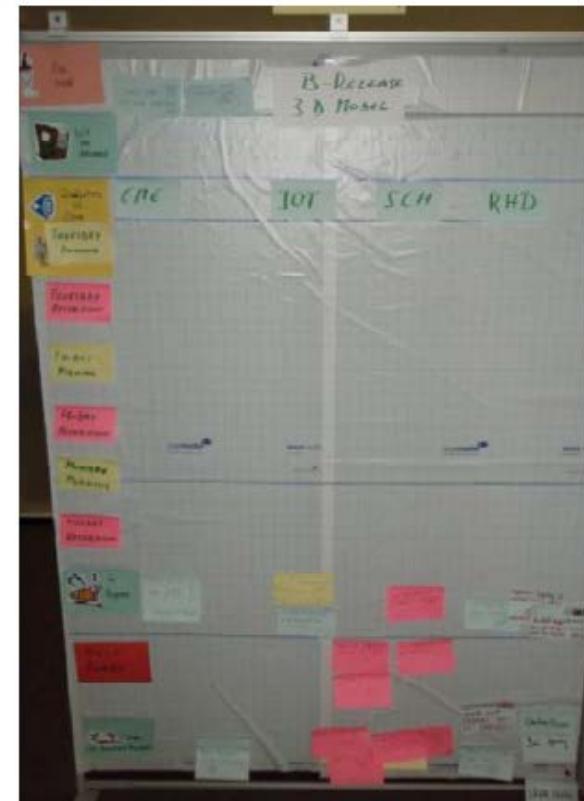
Scrum – Task Boards

Quelle: Heinz Erretkamps und Roland Frey: Agile Produktentwicklung bei Johnson Controls
Automotive Experience – Eine Erfolgsgeschichte - SCRUM DAY 2012, 5. JULI 2012, ST. LEON-ROT

Scrum Task Board – 1. Sprint



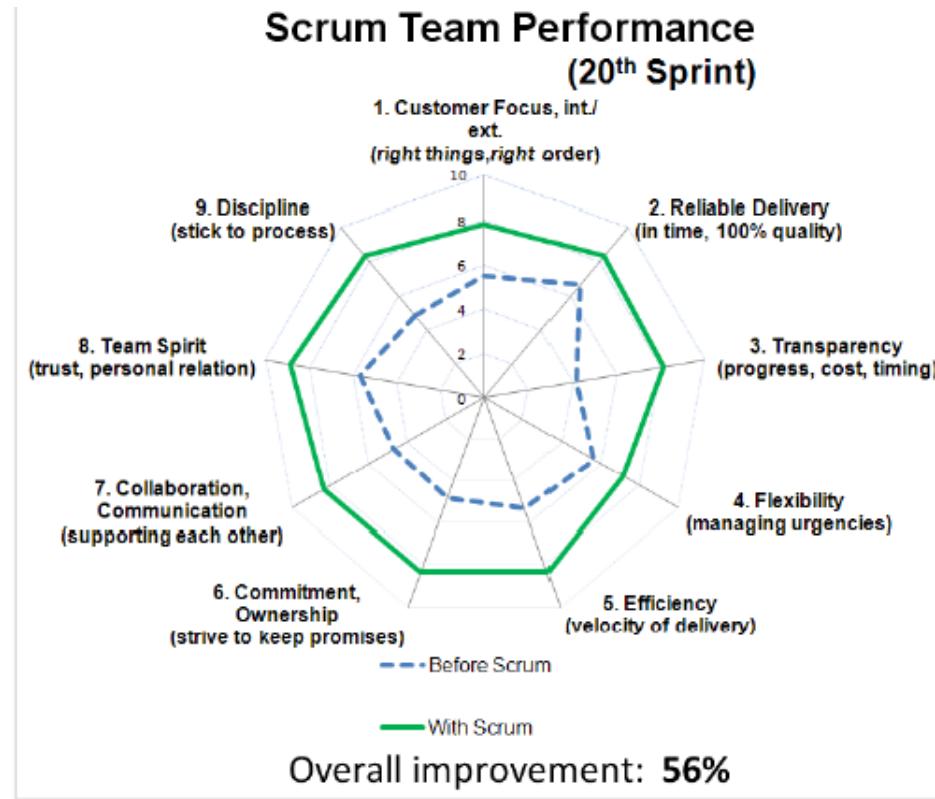
Nach der Planung



Ein halber Tag ist noch offen

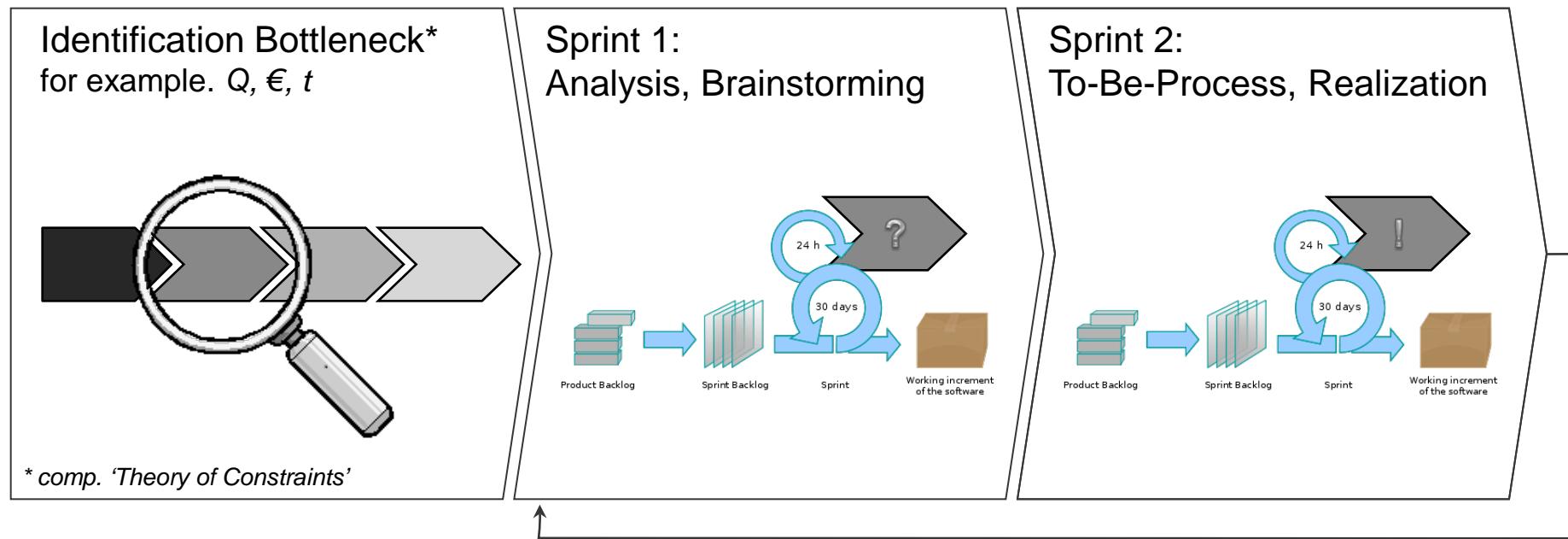
56% Overall Improvement in Designing Mechanism Parts

Key Performance Indicator – Self Assessment of Team-Performance



Scrum-Oriented Approach: Process Optimization

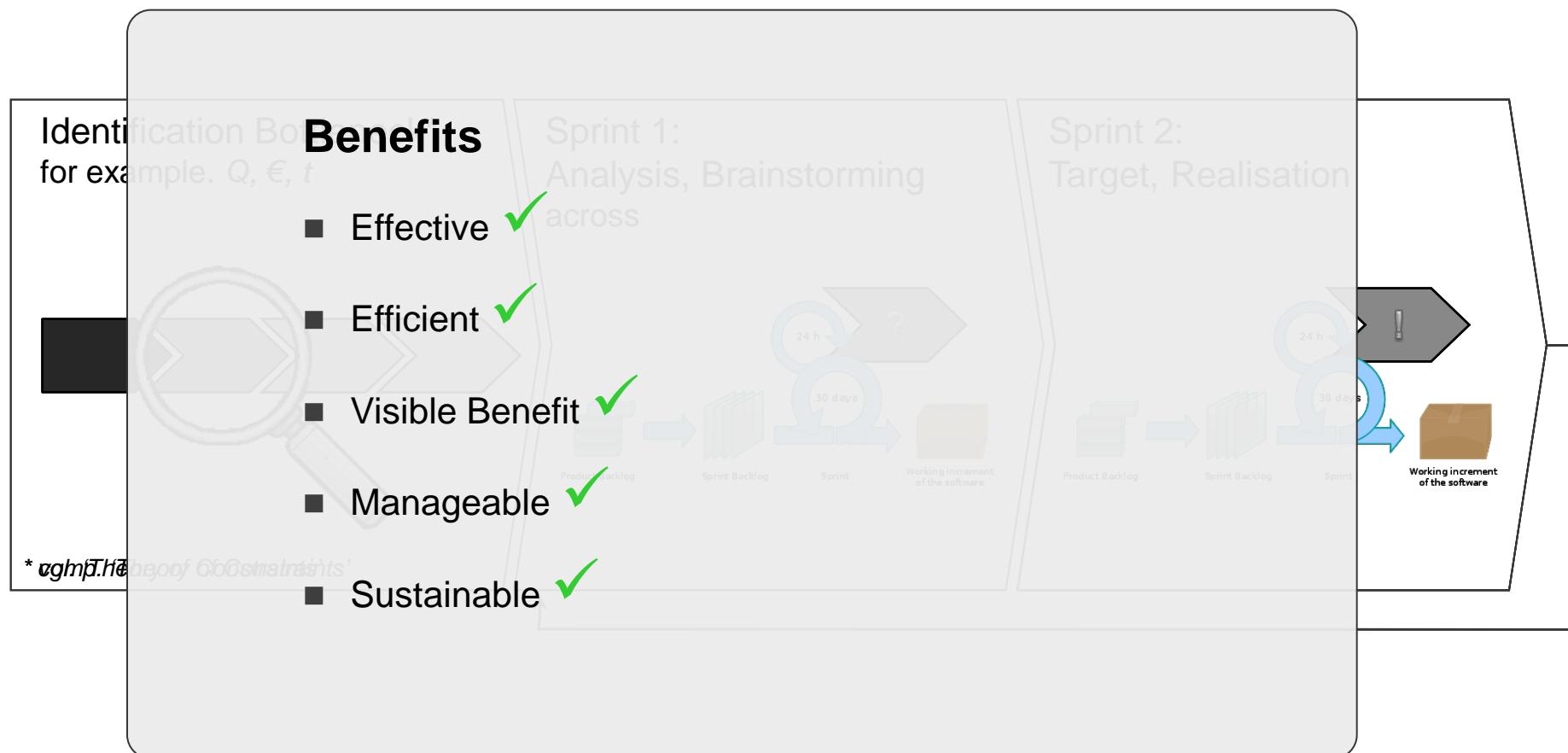
Example: Internal BPM-Consulting major German company



Insight:
“Most Optimizations work without IT-changes”

Scrum-Oriented Approach: Process Optimization

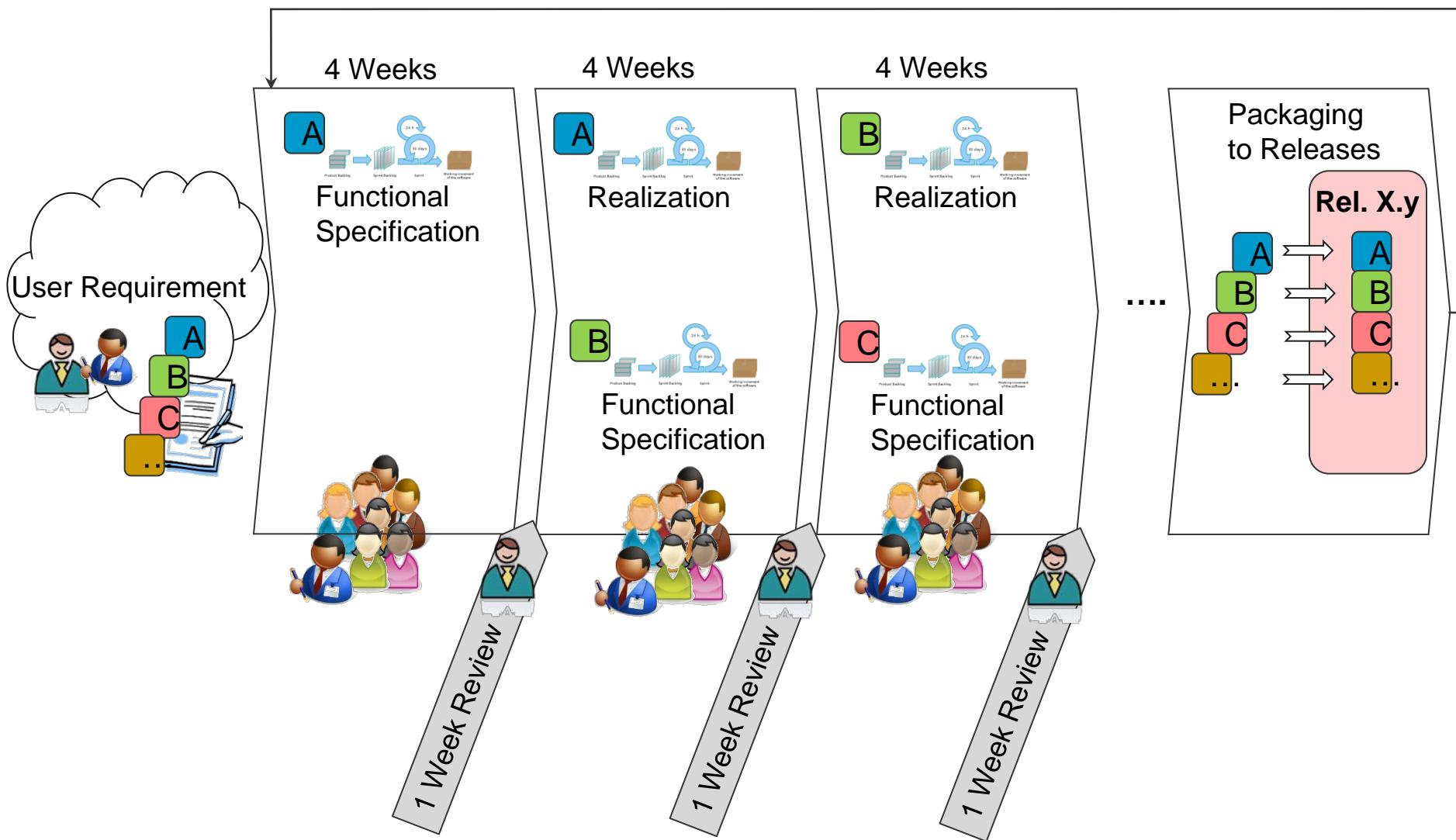
Example: Internal BPM Consulting major German company



Insight:

“Most Optimizations work without IT-changes”

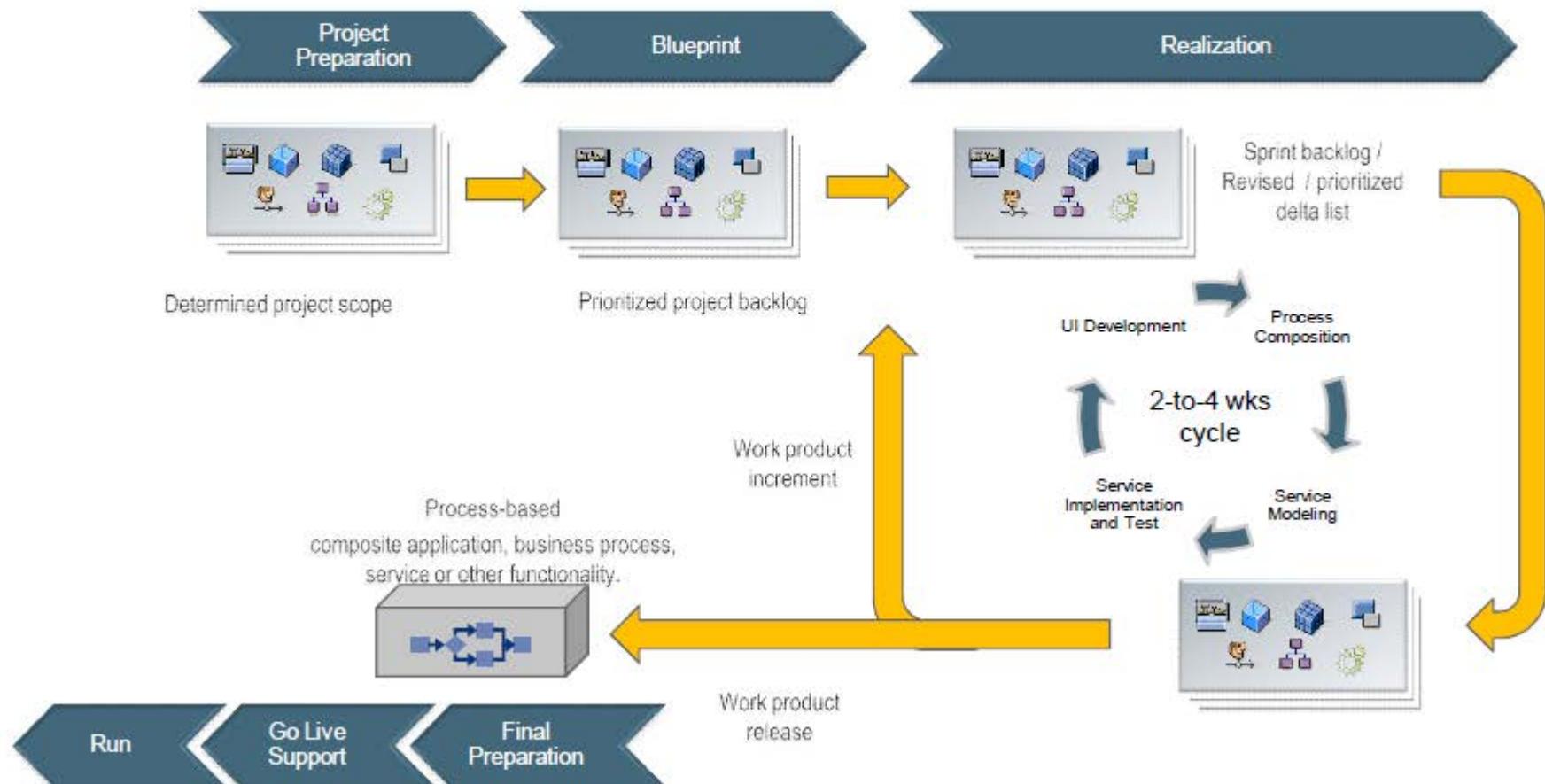
Example: Scrum In SAP-Based Process Management



Example: Scrum In SAP-Based Process Management



Agile Business Add-on to ASAP – an Overview



Source: Jan Musil, SAP AG: Accelerated implementation of Agile Methodology with “Business Add-ons for SAP Agile”

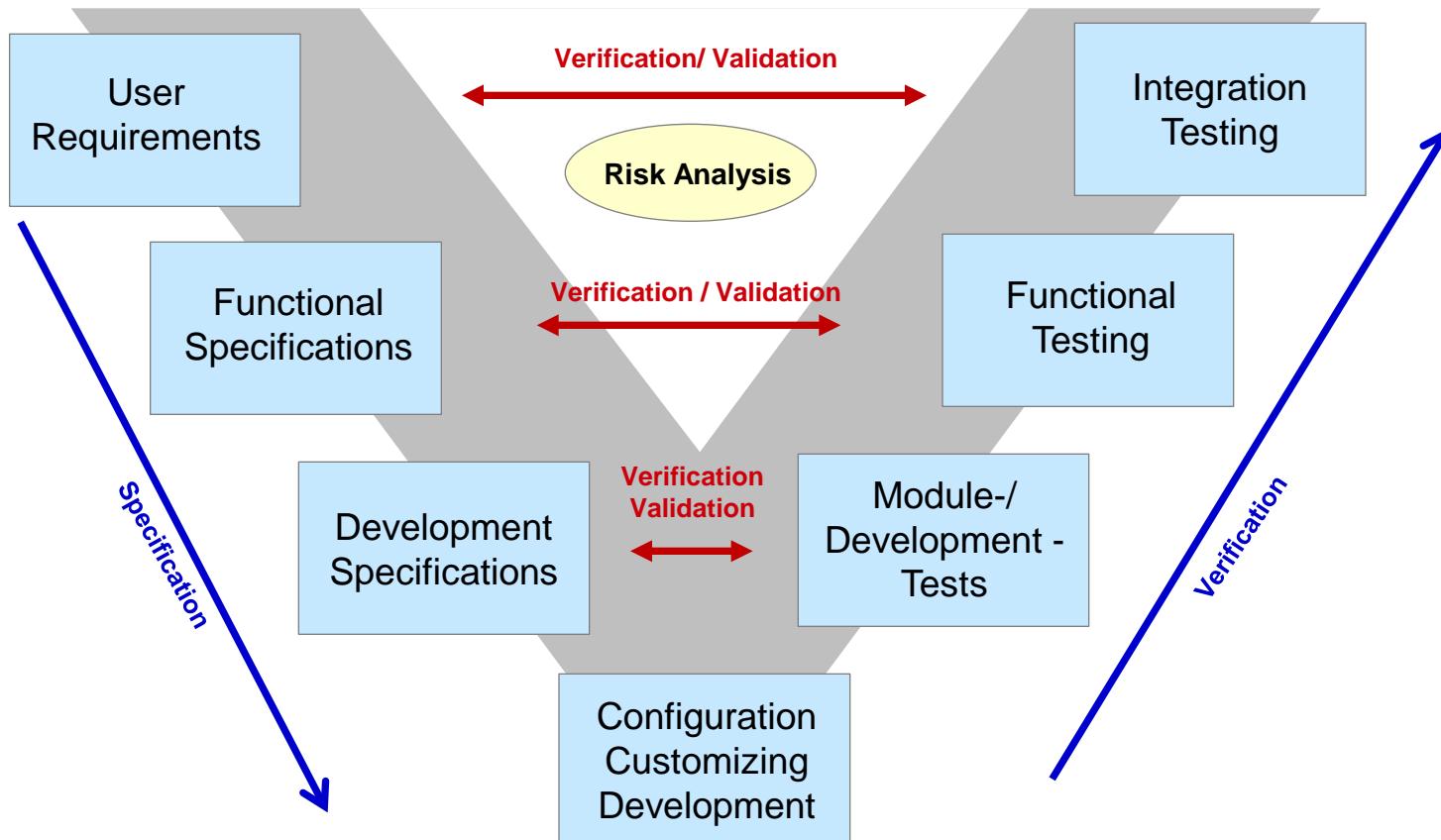
© SAP 2010 / Solutions Consulting Services / Page 24

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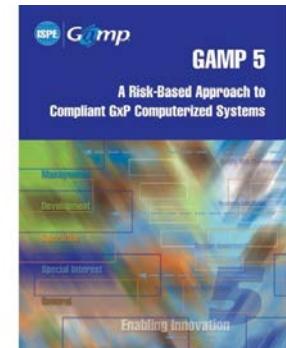
Classical Approach

**V-Model for prospective validation -
Sequential approach, each phase completed**



Requirements from GAMP 5

Quotes from GAMP 5 regarding Agile



- "Formal (change) control should **not be introduced too early** during development in order to minimize non-productive work during what are naturally iterative or evolutionary processes."
- "At the **end** of the development **phase** document review and approval should act as the **formal verification** that the document content is complete, accurate, and fit for intended use."
- "Changes made during approved prototyping work are **exempt** and should be subject to these controls **only** when they become **documented design proposals**."

Assessment: Using Scrum in Regulated Environment?

Exclusivity of V-Model

- GAMP 5 does not specify the classical V Model to be used necessarily any more
- Agile Models are not excluded
- User requirements don't have to be completely finalized before functional and technical specifications are written any more



Complete Documentation

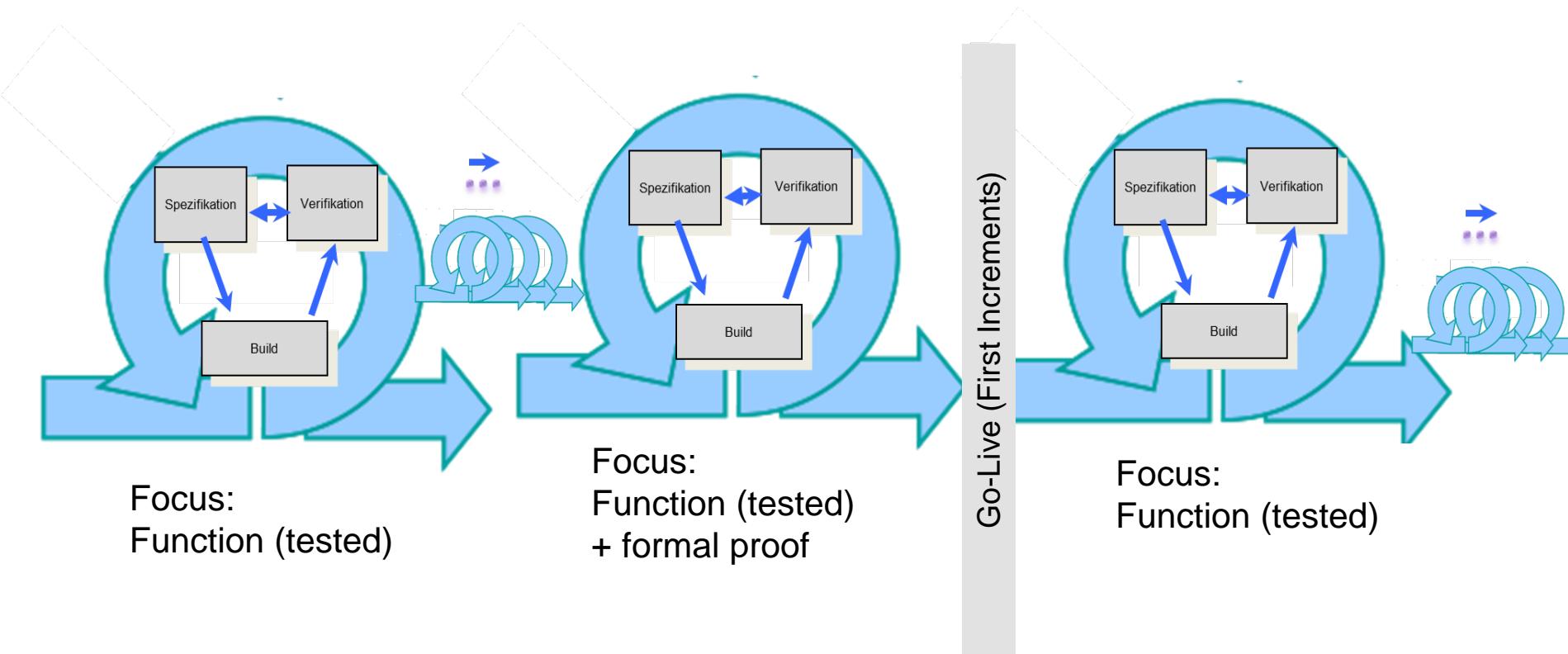
- No general lack of complete documentation in Scrum
- Documentation requirements for validation and their approval within the DoD (Definition of Done) can be included

Extensive Test Documentation

- adaptation of the method to validation requirements
- For example with a sprint cycle with the goal of obtaining formal test documentation and validation compliance

Possible Adapted Validation Procedure

Scrum cycle with sprint for formal proof in regulated environment



Quelle: Komus/Komus, CHEManager:

<http://www.chemanager-online.com/en/topics/pharma-biotech-processing/scrum-regulated-environment>

Good Arguments For Using Scrum

Close contact with people involved in the projects

- Direct user input for the formulation and prioritization of user requirements
- Testing of the product at the end of each sprint cycle
- Early user involvement and knowledge transfer

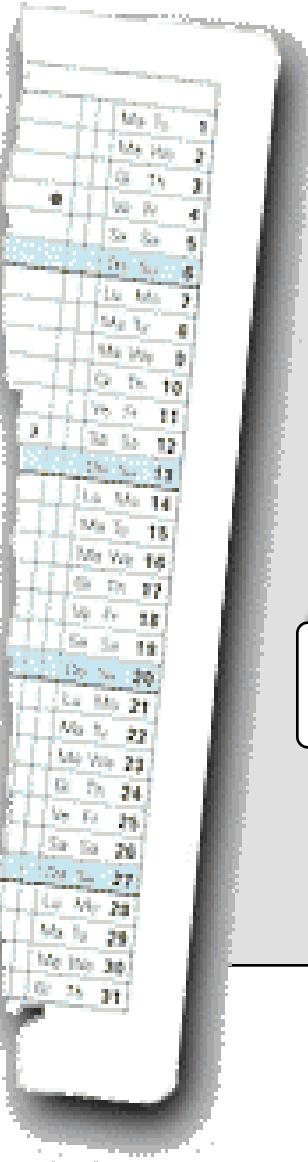
No accumulation of incomplete documentation

- With the end of the sprint all tasks have to be completely finished (for example with documentation and approval)
- No postponing of documentation

Accordance of documentation and **actual** updated technical and organizational system !



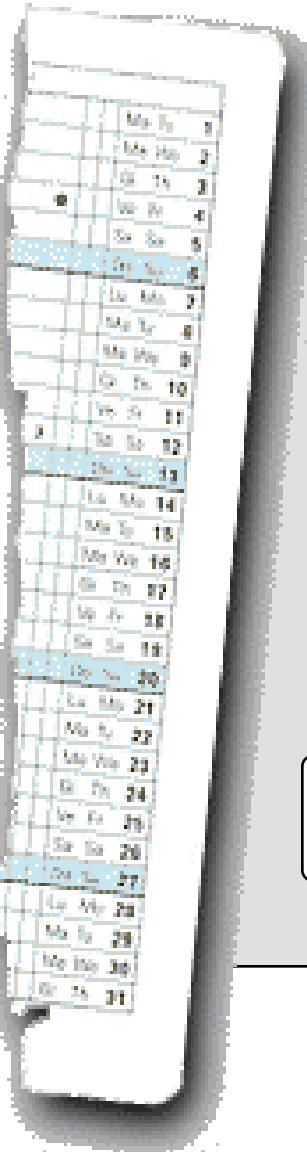
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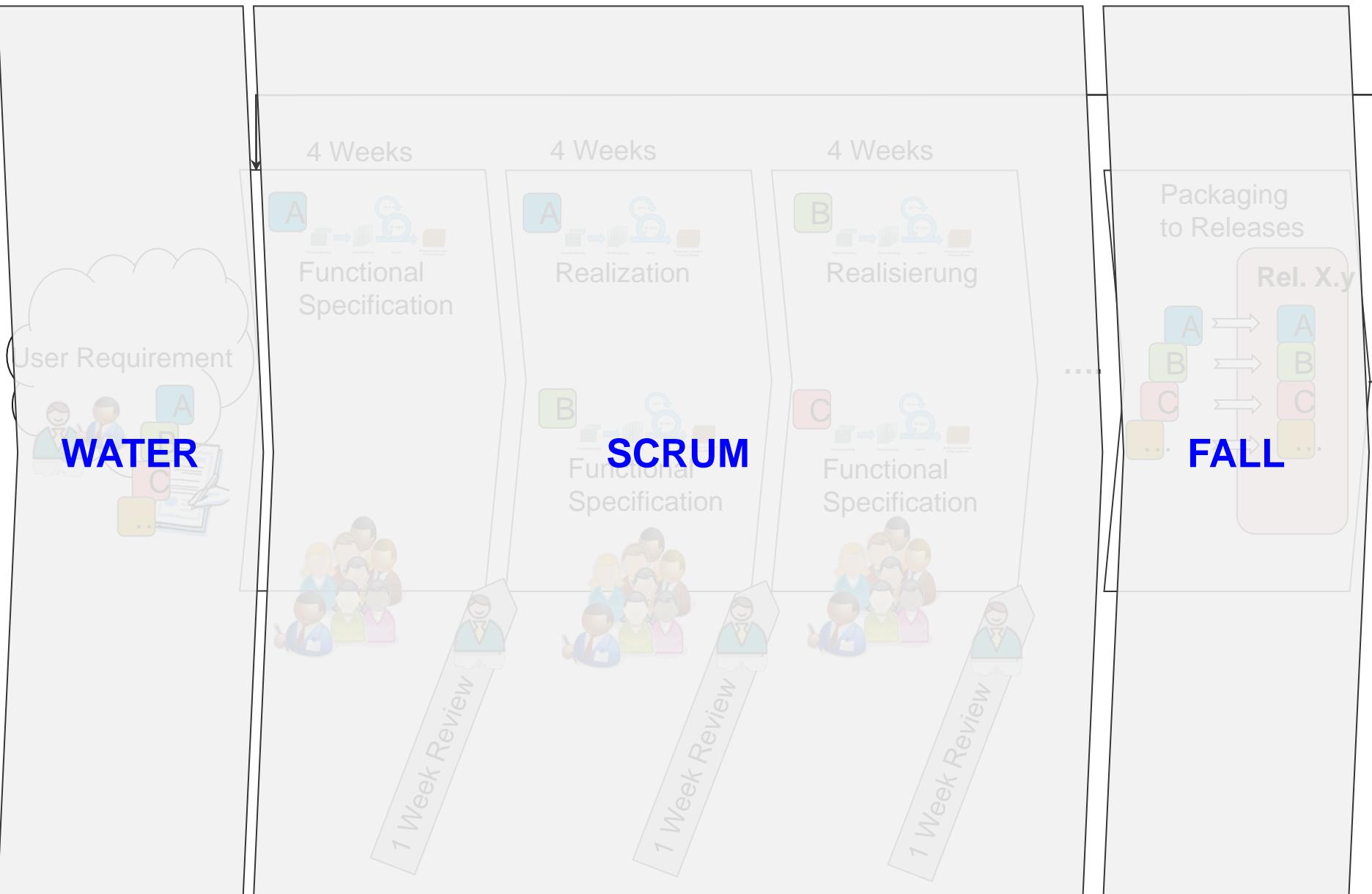
Lean Manufacturing and Agile

Lean Manufacturing	Agile Methods
Evolutionary Approach	Increments Of Software
Responsibility On Shop Floor (Andon)	Team Organization
Visualize Everything (Obeya)	Kanban Board / Burndown Chart
Pull-Logistic	Pull: Sprint-BL From Product BL
Waste (7 Muda)	Impediments
Gemba Walk	Close Communication w. Customer
Quality Focus	Deliverable Product/ No Debt
“Kanban”	“IT-Kanban”
Japanese Origin (Toyota System)	“Scrum” by Takeuchi/Nonaka

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Water-Scrum-Fall Is Common



It's The People, Stupid!

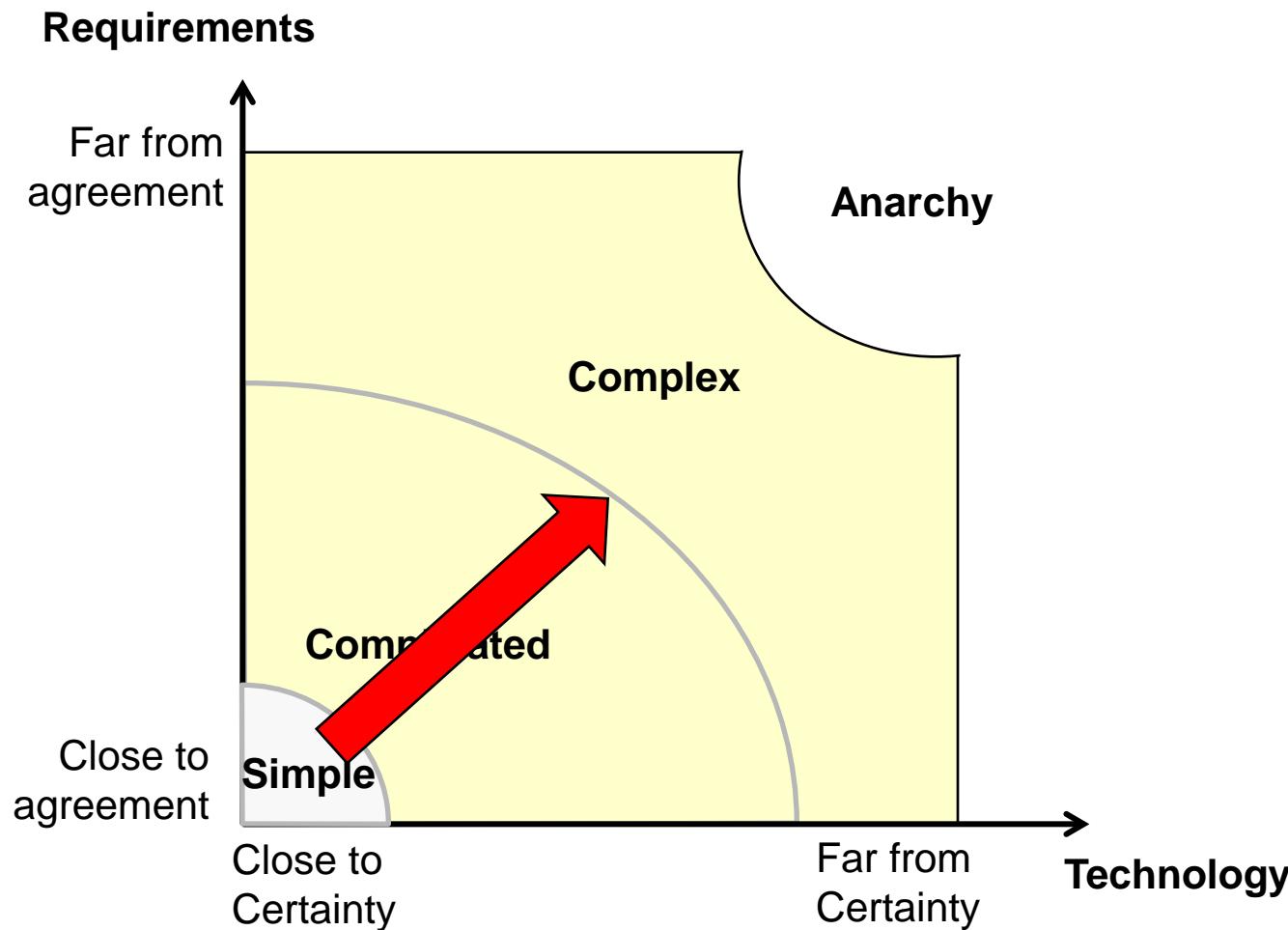


Change Changes The Game

A dark, dramatic photograph of a pier extending into turbulent, white-capped waves under a heavy, cloudy sky. The pier's structure is visible against the churning water and dark clouds.

**Culture and the ability to benefit from change
are the only sustainable competitive advantages
in times of uncertainty und disruptive change**

Complicated and Complex Challenges



Source: Ralph D. Stacey: Strategic Management And Organisational Dynamic: The Challenge of Complexity

Chaos?



Agility – Not Just A Means To An End

Agility is **not** just a means to an end in (IT-)Projects

Agility is about culture, collaboration and mindset **that will help you to stay successful** in times of constant and rapid change.

... and by the way, when you've achieved this way of working together and tackling challenges, it will be helpful in your IT-projects, too.



Studie Status Quo Chemie Pharma

Status Quo Prozess- und IT-Management in der Chemie und Pharma-Branche

- Wie sieht die aktuelle Praxis des IT- und Prozessmanagement in der Chemie/Life Science aus?
- Welche Rolle spielen Compliance-Vorgaben (GxP)
- Welche Praktiken sind verbreitet? Welche erfolgreich?

Teilnahme ab 19.11.2012 unter
www.status-quo-chemie-pharma.de

Teilnehmer erhalten ausführlichen Ergebnisbericht. Unter den Teilnehmern werden „BPM Best Practice“ und „Wikimanagement: Was Unternehmen von Social Media und Web 2.0 lernen können“ verlost.



Save The Date



© alswart- fotolia

Save The Date

- **Praxisworkshop: Scrum und Kanban im SAP- und Prozessmanagement**
21. und 30.11.2012 - www.bpm-erp-update.de
- **Start: Status Quo Chemie Pharma**
19.11.2012 – www.status-quo-chemie-pharma.de
- **3. Praxisforum BPM und ERP (27.11.2012, HS Koblenz)**
Thema: *Agile Methoden in IT- und Prozessmanagement*
www.bpm-erp.de (Nur für Anwender – Nachrückliste)
- **Praxisworkshop:**
BPM-ERP-Update 2013: Chancen und Herausforderungen für Prozess- und SAP-Management in 2013
11.12.12 und 15.1.13 - www.bpm-erp-update.de

Questions?

Thank You For Your Attention



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www.bpm-erp.de
www.it-radar.info
www.bpm-erp-update.de

You'll Find Many Of My Presentations on www.komus.de/vortrag

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Study Status Quo

Chemicals & Pharmaceuticals

Status Quo Process and IT-Management
in Chemical and Pharmaceutical industries

- What is the current practice of IT and Process Management in Chemical & Life Sciences?
- What role plays Compliance (GxP) ?
- What Practices are common? Which are successful?

Participation from 19.11.2012 at
www.status-quo-chemie-pharma.de

Participants receive detailed report.

Among participants „BPM Best Practice“ and „Wikimanagement: Was Unternehmen von Social Media und Web 2.0 lernen können“ are raffled.

