



Developing a cloud based web-shop

New technologies and agile elements

David Huperz, Stuttgart 15.06.2016



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Developing a cloud based web shop

New technologies and agile elements

BPW – the surrounding conditions for the projects

Introduction to the project

- › **Scope**
- › **uncertainties**

Agile elements

Technology used

BPW Group target industries

All sections of the commercial vehicle industry



For vehicle operators



For vehicle manufacturers



Agricultural vehicles



Work machines, piste bashers, trailers for cars and light trucks



Trucks & buses

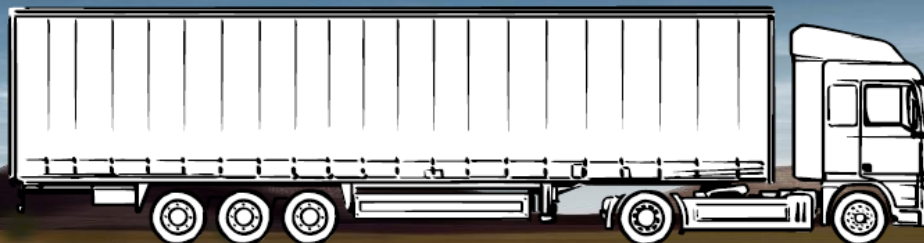
Application examples of the Curtainsider*

we think transport



Always the appropriate solution

* The specific equipment depends on a range of factors including the field of application.



BPW

- › Chassis
- › Tyre pressure monitoring
- › Support devices
- › Brake cylinders
- › Aluminium wheels
- › Financing and leasing
- › Maintenance contracts

In development:

- › Brake lining wear sensor monitoring
- › Loading space monitoring
- › Axle load evaluation
- › ...

Ermax

- › Lighting systems
- › Cable systems

In development:

- › Bus system IT-Net
- › ...

HBN-Teknik

- › Air tank
- › Mudwing
- › Diverse plastic components

In development:

- › The ECO Vision
- › Plastic components
- › ...

Hestál

- › Structure technology
- › Lifting roof monitoring
- › Locking technology
- › Electromechanical door locking
- › Pillars

In development:

- › Lashing ring sensor monitoring
- › ...

idem telematics

- › Truck telematics
- › Trailer telematics

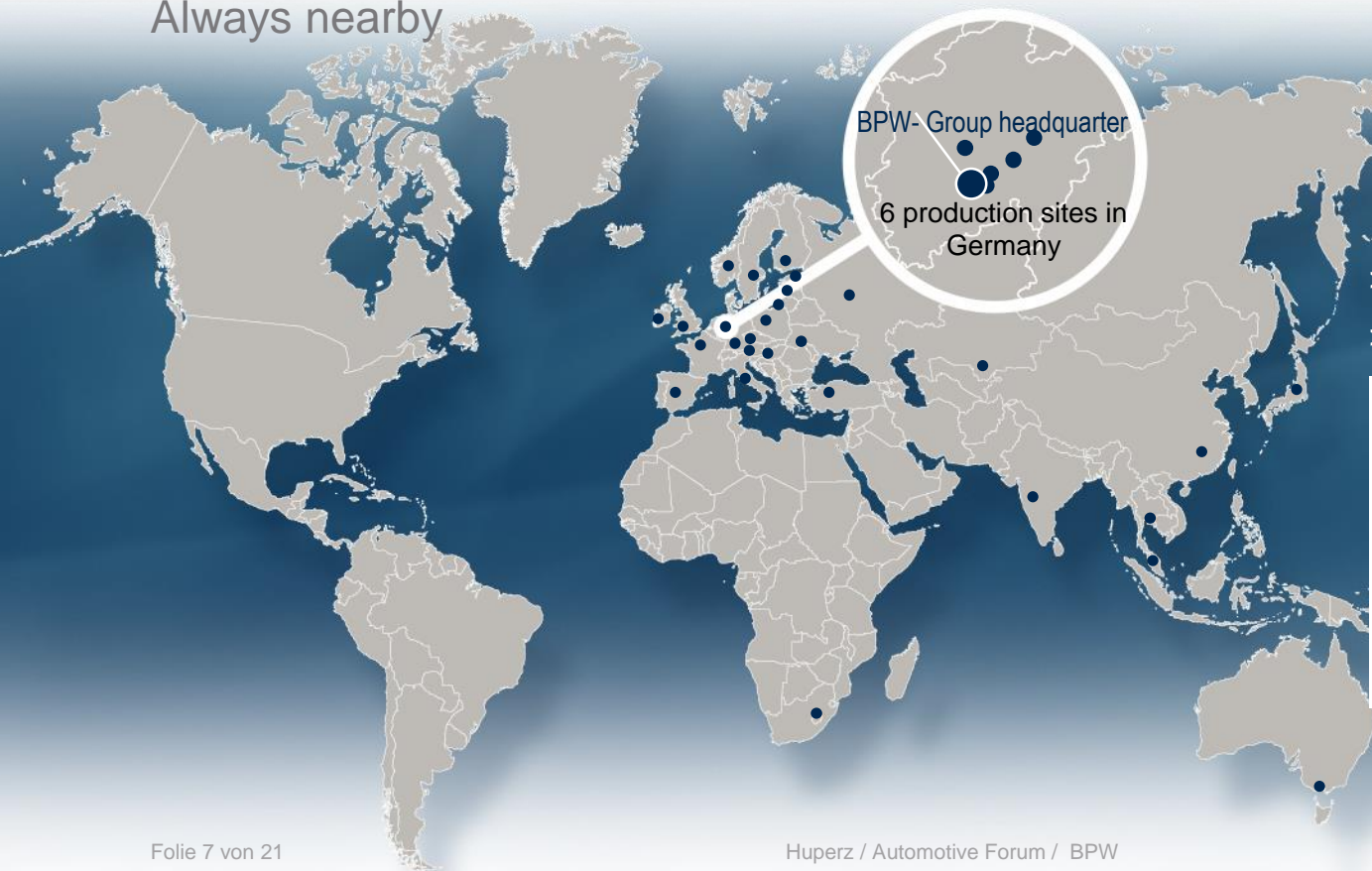
In development:

- › Branch solutions
- › ...

BPW Group worldwide

Always nearby

we think transport



10 development sites
17 production sites worldwide
> 20 countries*
> 50 sales companies

- › Many years of expertise in international markets
- › Close customer proximity
- › Market-oriented production
- › High level of specialisation
- › Comprehensive services

* Marked sites may deviate



Introduction to the project

Scope

Web-Shop developed for a manufacturer of products with variants

- › Thousands of different products in the “standard” program
- › Described by hundreds of features

Used by a wide range of users

- › Distributed all over Europe
- › Casual users as well as frequent users
- › sales people as well as engineers

Introduction to the project

Scope

Existing application developed in 2010

- › Well-known and well-structured data
- › Flash based web technology
- › No E-Commerce process is like the other → high amount of individual code
- › Technology stack SAP E-Commerce not to be maintained in the future by SAP

Functional improvements

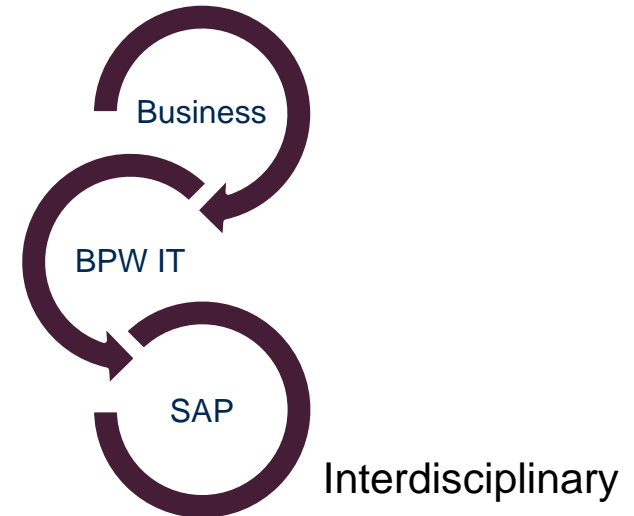
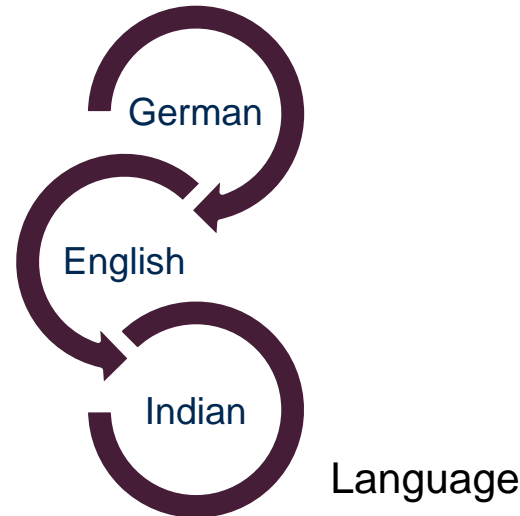
- › Deeper integration with our ERP sales processes
- › Higher degree of process automation
- › Has to work on mobile devices
- › Optimization and refresh of the already intuitive UI
- › demands for round-the-clock availability

Introduction to the project

Scope

New implementation partner

- › SAP custom development
- › Development team in India, German “beachhead” at the start of the project
- › Communication



Introduction to the project

Uncertainties

Will the new application do all the things the old one did?

Will all of our functional improvements be implemented correctly?

Will the application meet the performance requirements?

Will all of our users be able to work with the new application?

Will the new technology stack fulfill all of its promises?

Will we understand each other?

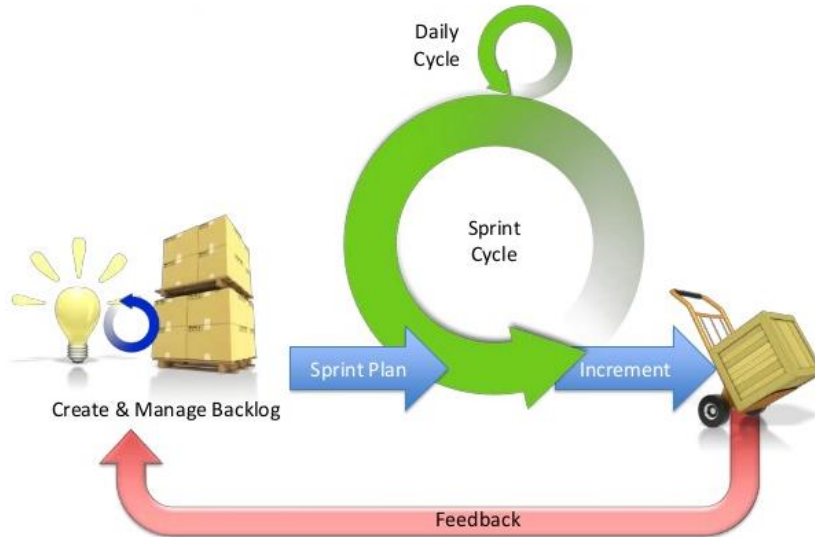
Agile elements in software development

SCRUM also for the customer?

SCRUM and agile development methods are widely used among software vendors and development-oriented organizations. State of the art in customer organizations?

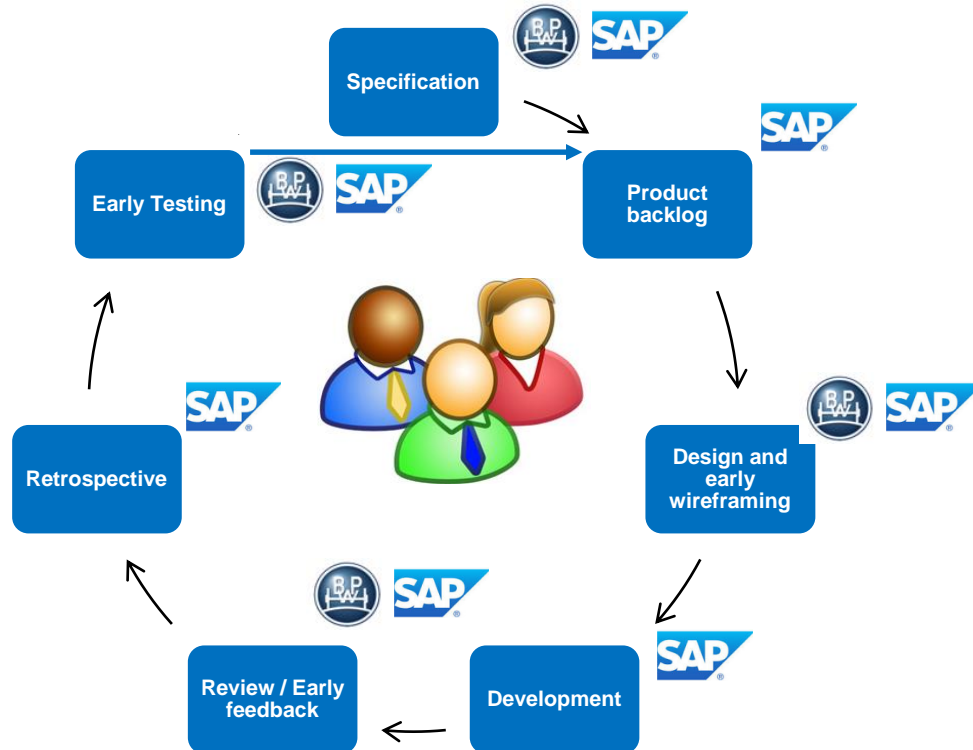
Tailoring for BPW necessary because:

- fixed-price contract with SAP
- No trained product owners in business unit
- detailed specification necessary up-front
- language gaps
- process automation with interfaces



Agile elements in software development

SCRUM also for the customer?

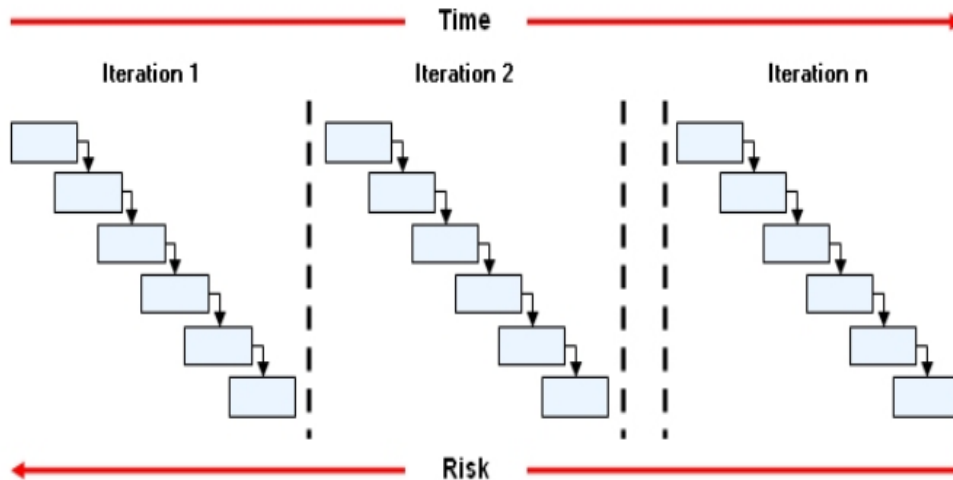


user-focused approach

- specification (missing look & feel)
- waterfall-like release planning
- iterative-incremental approach
- Early wireframing
- Early feedback
- Early testing

Agile elements in software development

iterative approach

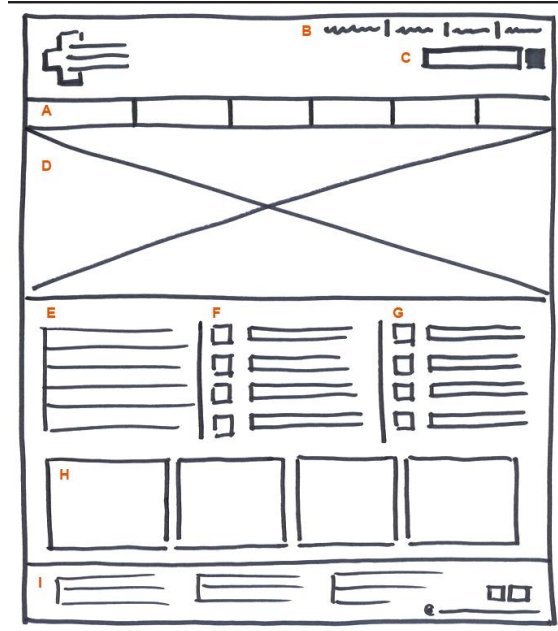


<http://www.fcslltech.com/iterativedevelopment.html>

- › Complete lifecycle per iteration
 - › Prioritize: High risk items first
 - › Time-Boxing
 - › Controlled change
 - › users experience look and feel early
- ➔ Gain confidence and improve project marketing by early successes

Agile elements in software development

Early wireframing



<http://teamddm.com>

- › Design UI together with (selected) user
- › gather level of complexity and how to handle it
- › creating s.th. is motivating
- › combine ideas of the developers and the users
- › develop a common understanding of the goal

➔ helps to avoid expensive changes

Agile elements in software development

Early feedback

- › "Show and tell"-sessions at the end of each iteration to help prospective users
- › to "see" early version of an application in action
- › make suggestions to the developer what to improve
- › align with the goal described in specification
- › assess non-functional requirements like performance and state of readiness

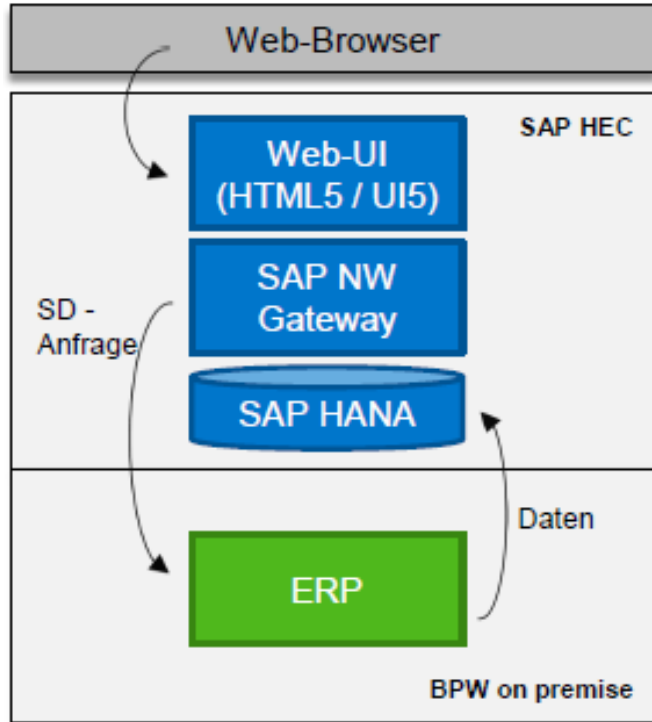
Agile elements in software development

Early testing

- › before the usual pre-go-live test-cycle
- › test cases and test data created along the specification
- › very concise definition of how software shall behave
- › together with the users
- › surface exceptions to the attention of the developers
- › improve quality of application

New technologies

Side-Car Scenario



- › SAP UI5, SAP NW Gateway and SAP HANA
- › no prebuilt functionality for E-Commerce processes
- › Leverage new technologies by placing them in the SAP private Cloud (HEC)
- › lack of operational HANA know-how at BPW
- › security
- › availability around the clock
- › no capital outlay, subscription at a fair price
- › reliable operation
- › dedicated contact person at SAP HEC

Summary

- › A "pure" SCRUM may not always be your preferred agile software development procedure model, a tailored approach can make sense
- › Use early wireframing, early feedback and early testing as a customer
 - › help users to experience the look and feel at an early stage
 - › supports developers in understanding what the user wants
 - › supported by an iterative approach, deal with uncertainties
 - › avoid costly changes
- ➔ a "Win-Win" for both sides

- › A good choice: HANA in the Cloud and SAP UI 5



Thank you very much for your attention!

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we think transport



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