

31.8.–3.9.2015
in Nürnberg

Herbstcampus

Wissenstransfer
par excellence

Erfolgreich im Scrum-Team mit Visual Studio Team Foundation Server

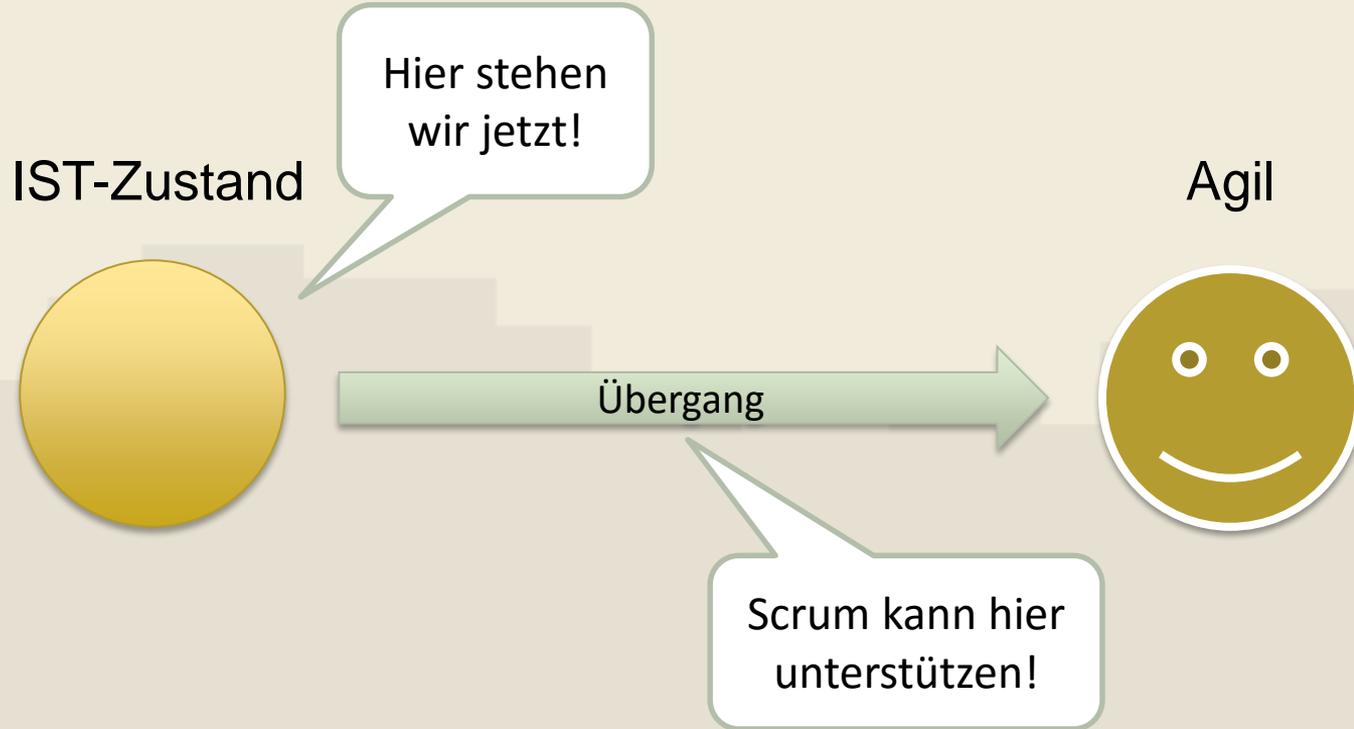
Beginn: 14:00

Neno Loje

Team Foundation Server (TFS) | Application Lifecycle Management (ALM)

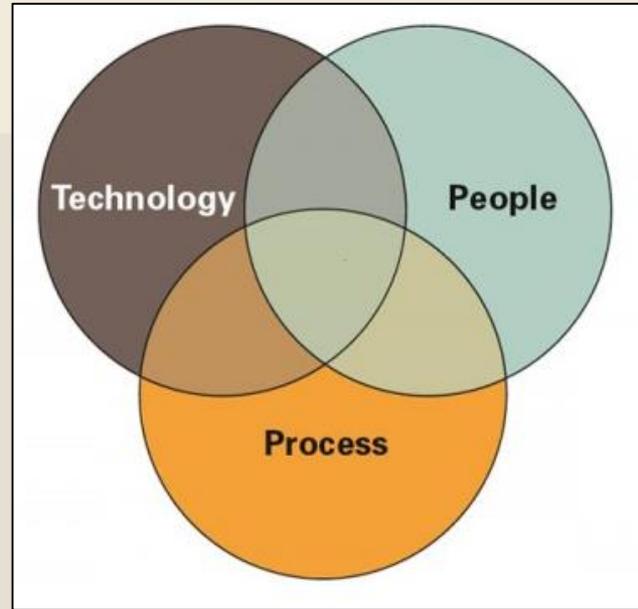
Moderne Softwareentwicklungsmethoden (Scrum)

Wozu Scrum?



Erfolgreiche Teams

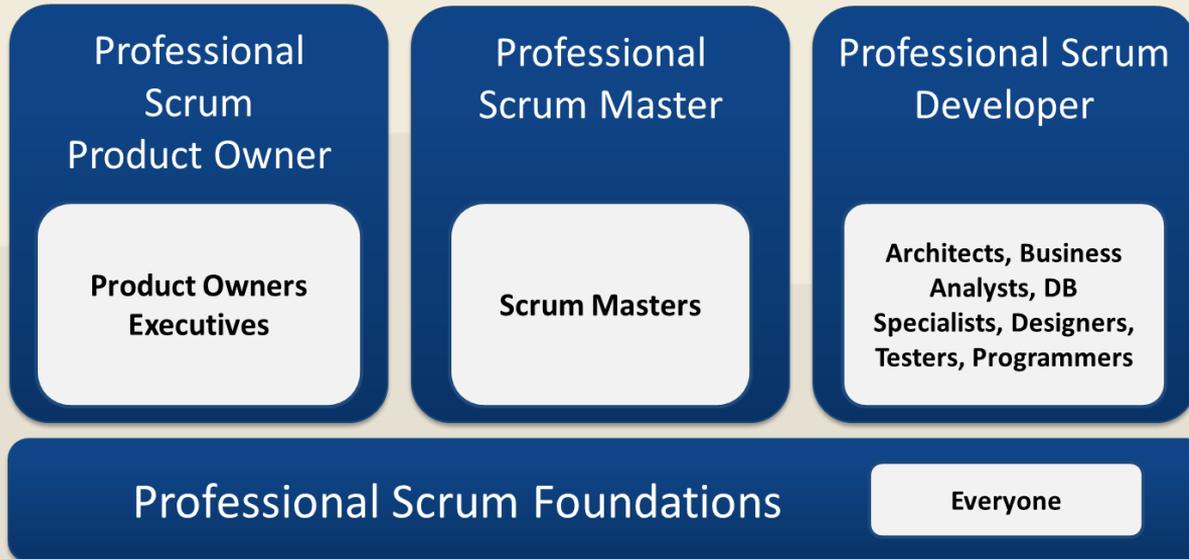
Was braucht es für ein erfolgreiches Team?



Professional Scrum Developer (PSD) Program



Gegründet 2009 von Microsoft und scrum.org



Mehr über das PSD Program: <http://msdn.microsoft.com/en-us/vstudio/ff433643.aspx>

Scrum basiert auf drei Säulen



We all know what is going on.

Transparency

Check your work as you do it.

OK to change tactical direction.

Adaptation

Inspection

Neues Teamprojekt anlegen

Visual Studio Scrum ist die Standard-Prozessvorlage

Hinweis: Im TFS ist es in vielen (wenn nicht allen) Fällen ratsam, ein "Team" in einem bestehenden Teamprojekt anzulegen, anstelle eines neuen Teamprojekts.

CREATE NEW TEAM PROJECT

Project name
Note: You cannot change the name of your project after you have created it

Description

Process template
Microsoft Visual Studio Scrum 3.0
MSF for Agile Software Development 7.0
MSF for CMMI Process Improvement 7.0

Version control
Team Foundation Version Control (TFVC) uses a single, centralized server repository to track and version files. Local changes are always checked in to the central server where other developers can get the latest changes.

Create project Cancel

Vorbereitungen (= vor Sprint 1)

- Produktvision (wo wollen wir hin?)
- Was wird unsere Sprintlänge? (& Start-/End-Tage)
- Wer wird der Product Owner?
- Wer kommt in das Development Team?
- Wer wird der Scrum Master?
- TFS-Umgebung einrichten
- Initiales Product Backlog

Neues TFS-Team anlegen

Overview

Sprint 2

28. Februar - 5. März

Work

Create new

Visual Studio

0 h

Backlog items: 5 not started

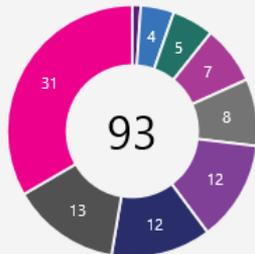
- Backlog
- Task board
- Queries

- [Open in Visual Studio](#)
Requires Visual Studio 2013
- [Get Visual Studio](#)
See Visual Studio downloads

Pinned Items

Alle Work Items - Chart

- Open
- Active
- Committed
- In Progress
- Approved
- New
- To Do
- Removed
- (other)



All Impediments

1

Work items

Dev

0

Recent changes

ContinuousIntegration

Completed 21.05.2014



Team rooms

- [Scrum Team Room](#)
0 users in room

Other links

- [Request feedback](#)
- [Configure schedule and iterations...](#)
- [Configure work areas...](#)

Members

Manage...



Neue Ideen landen als Features auf dem Backlog

Visual Studio Team Foundation Server 2013 / ScrumProject

Neno Loje | ⚙️ ?

HOME CODE **WORK** BUILD TEST

Search work items 🔍

Backlogs Queries

Features

Backlog items

Current

- Sprint 1

Future

- Sprint 2
- Sprint 3
- Sprint 4
- Sprint 5
- Sprint 6

Features

Backlog Board

View Features

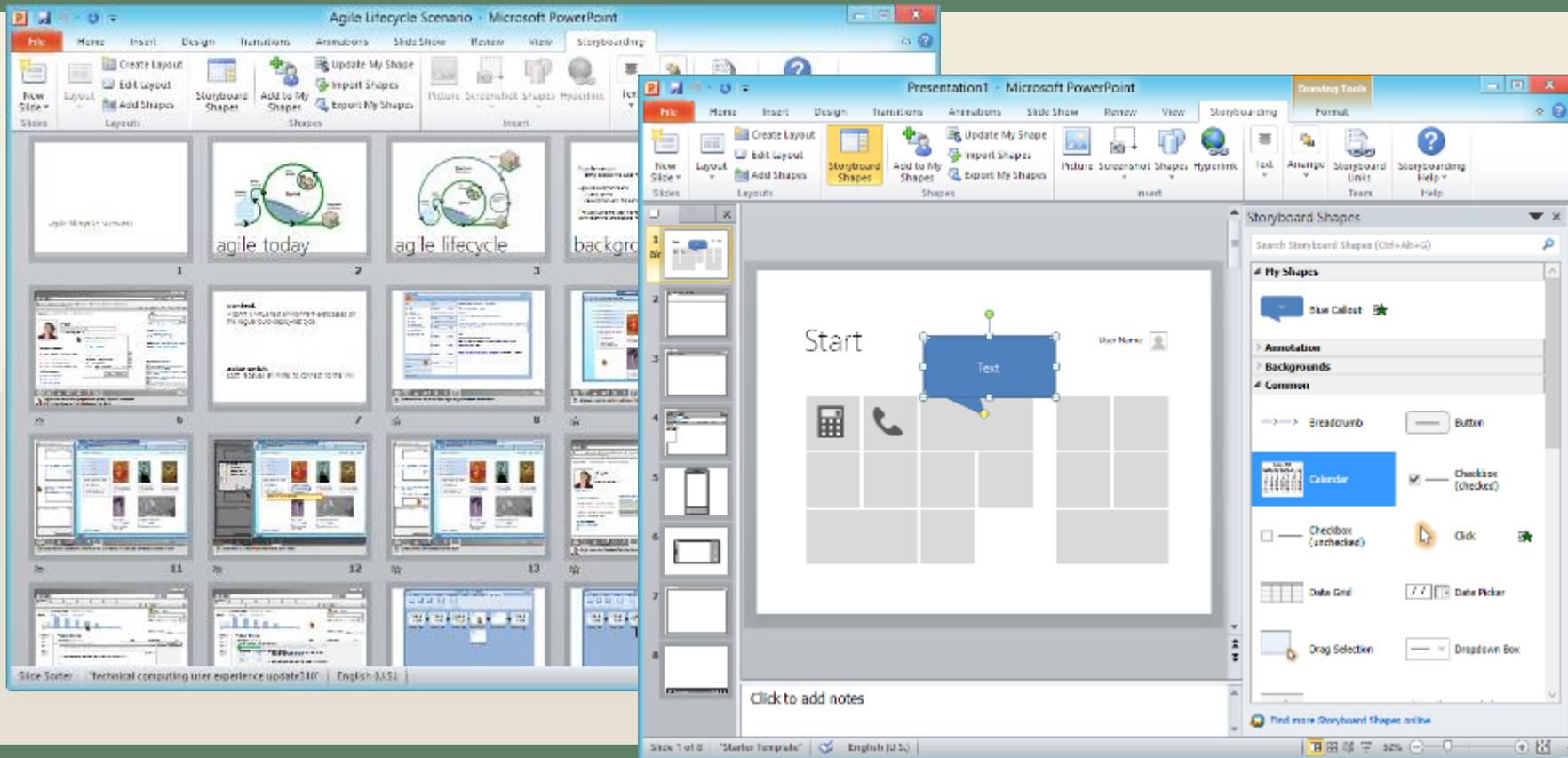
New Create query | Column options | ✉️

Type **Feature** ✕

Title ✕ Add

Order	Work Item Type	Title	State	Busin...	Tags
1	Feature	Full-text search over all items in the database	In Progress		Customer A Customer B
2	Feature	Integration with social media services	In Progress		Customer A
3	Feature	Reporting: Customizable Charts	New		Customer A
4	Feature	New Module: Vendor Management	New		Customer A Customer B
5	Feature	Various export functions	New		Customer B

Ideen mit Storyboards beschreiben für Jedermann



Features in kleinere Product Backlog Items zerlegen

Visual Studio Team Foundation Server 2013 / ScrumProject

Neno Loje | ⚙️ ?

HOME CODE **WORK** BUILD TEST

Search work items 🔍

Backlogs Queries

Features Backlog items

Current
Sprint 1

Future
Sprint 2
Sprint 3
Sprint 4
Sprint 5
Sprint 6

Features to Backlog items

Backlog Board

View Features to Backlog items

+ - Create query Column options ✉️

Work Item Type	Title	State	Busin...	Tags
Bug	Integration of Reports	New		
Product Backlog Item	Text search over all items in the database	In Progress	Customer A	Customer B
Feature	Integration with social media services	In Progress	Customer A	
Feature	Reporting: Customizable Charts	New	Customer A	
Feature	New Module: Vendor Management	New	Customer A	Customer B
Feature	Various export functions	New	Customer B	

Übersicht: Features und Backlog

Visual Studio Team Foundation Server 2013 / ScrumProject

Neno Loje | Settings | Help

HOME CODE **WORK** BUILD TEST

Search work items

Backlogs Queries

Features

Backlog items

Current

- Sprint 1

Future

- Sprint 2
- Sprint 3
- Sprint 4
- Sprint 5
- Sprint 6

Backlog items to Features

Backlog Board

Mapping Off View Backlog items to Features

Create query | Column options | Filter

Work Item Type	Title	State	Effort	Iteration Path	Tags
Feature	Printing of Reports	New		ScrumProject	
Product Backlog Item	Implement printing logic	Committed	3	ScrumProject\Release 1\Sprint 1	
Product Backlog Item	Print Preview	Committed	3	ScrumProject\Release 1\Sprint 1	
Product Backlog Item	Allow user to select printer	Committed	1	ScrumProject\Release 1\Sprint 1	
Product Backlog Item	Allow user to configure header/footer	New	2	ScrumProject	

Product Backlog Item im Team Foundation Server (I)

Product Backlog Item 31: Implement printing logic

Tags [Add...](#)

Implement printing logic

Iteration [ScrumProject](#)

STATUS		DETAILS	
Assigned To	<input type="text"/>	Effort	<input type="text" value="3"/>
State	<input type="text" value="New"/>	Business Value	<input type="text"/>
Reason	<input type="text" value="New backlog item"/>	Area	<input type="text" value="ScrumProject"/>
		Backlog Priority	<input type="text"/>

DESCRIPTION [STORYBOARDS](#) [TEST CASES](#) [TASKS](#)

ACCEPTANCE CRITERIA [HISTORY](#) [LINKS \(1\)](#) [ATTACHMENTS](#)

B / **U**

B / **U**

Product Backlog Item im Team Foundation Server (II)

Product Backlog Item 31: Implement printing logic

Tags

Implement printing logic

Iteration

STATUS	DETAILS
Assigned To <input type="text"/>	Effort <input type="text" value="3"/>
State <input type="text" value="New"/>	Business Value <input type="text" value="50"/>
Reason <input type="text" value="New backlog item"/>	Area <input type="text" value="ScrumProject"/>
	Backlog Priority <input type="text"/>

DESCRIPTION STORYBOARDS TEST CASES TASKS

ACCEPTANCE CRITERIA HISTORY LINKS (1) ATTACHMENTS

B / **U**

As an **assistant of the CEO**, I want to be able to **print out reports**, so our CEO can have a look at them (*as he's not used to work with computers*).

Product Backlog Item im Team Foundation Server (III)

Product Backlog Item 31: Implement printing logic

Tags

Implement printing logic

Iteration

STATUS	DETAILS
Assigned To <input type="text"/>	Effort <input type="text" value="3"/>
State <input type="text" value="Approved"/>	Business Value <input type="text" value="50"/>
Reason <input type="text" value="Approved by the Product Owner"/>	Area <input type="text" value="ScrumProject"/>
	Backlog Priority <input type="text"/>

DESCRIPTION STORYBOARDS TEST CASES TASKS

ACCEPTANCE CRITERIA HISTORY LINKS (1) ATTACHMENTS

DESCRIPTION

As an **assistant of the CEO**, I want to be able to **print out reports**, so our CEO can have a look at them (*as he's not used to work with computers*).

ACCEPTANCE CRITERIA

You are done, when...

- The printed paper comes out of the printer.
- The user can choose to print in b/w or color.
- Our company logo is displayed on the upper-right.
- The printing does not block the UI while preparing.

Sprint Planning / Product Backlog (refined)

Visual Studio Team Foundation Server 2013 / ScrumProject

Neno Loje | Settings | Help

HOME CODE **WORK** BUILD TEST

Search work items

Backlogs Queries

Features

Backlog items

Current

- Sprint 1

Future

- Sprint 2
- Sprint 3
- Sprint 4
- Sprint 5
- Sprint 6

Backlog items

Backlog Board

Forecast Off Mapping Off View Backlog items

New [Add] [Edit] | Create query | Column options | [Refresh]

Order	Work Item Type	Title	State	Effort	Iteration Path	Tags
1	Product Backlog Item	Implement printing logic	Committed	3	ScrumProject\Release 1\Sprint 1	
2	Product Backlog Item	Print Preview	Committed	3	ScrumProject\Release 1\Sprint 1	
3	Product Backlog Item	Allow user to select printer	Committed	1	ScrumProject\Release 1\Sprint 1	
4	Product Backlog Item	Allow user to configure header/footer	New	2	ScrumProject	

Das Product Backlog

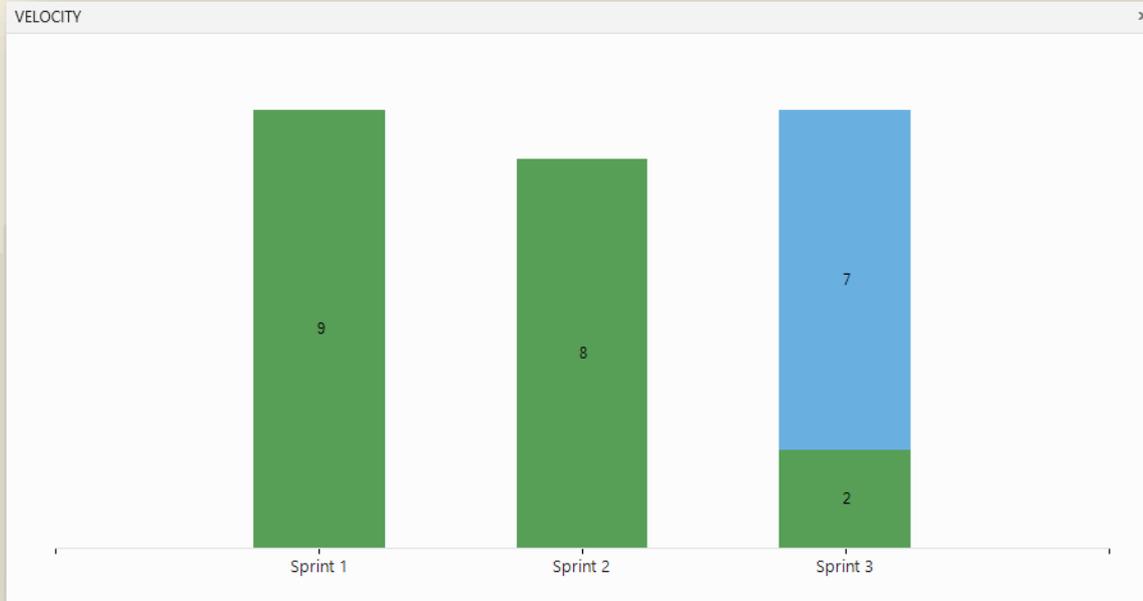
- **Geordnete** Liste an Anforderungen
 - Jedes Element wird als Product Backlog Item (PBI) bezeichnet
 - Ein PBI kann ein Feature Request, User Story, Bug, etc. sein
- Verantwortet vom **Product Owner**
- **Jeder** kann Ideen hinzufügen
- Regelmäßig vom **Scrum Team** besprochen und verfeinert
- Jedes PBI hat einen **Business Value** (Nutzen)
- **High-level** Schätzungen (durch das Development Team)
 - Nur Größe, ggf. mit Planning Poker

Sprint Planning Meeting

- Markiert den Beginn eines Sprints
- Teil 1 ("Was")
 - Dev Team schätzt wie viel PBIs es liefern kann
 - Scrum Team legt ein Sprintziel fest
- Teil 2 ("Wie")
 - Team erstellt ein Sprint Backlog sowie einen Plan wie die PBIs in lauffähige Software umgewandelt werden sollen.
 - Häufig indem Tasks erstellt werden um das PBI zu erfüllen.

Sprint Planning / Velocity-Diagramm

Wieviel konnten wir in den vorherigen Sprints erreichen?



Sprint Planning / Teil I (Was) – Team liefert Prognose

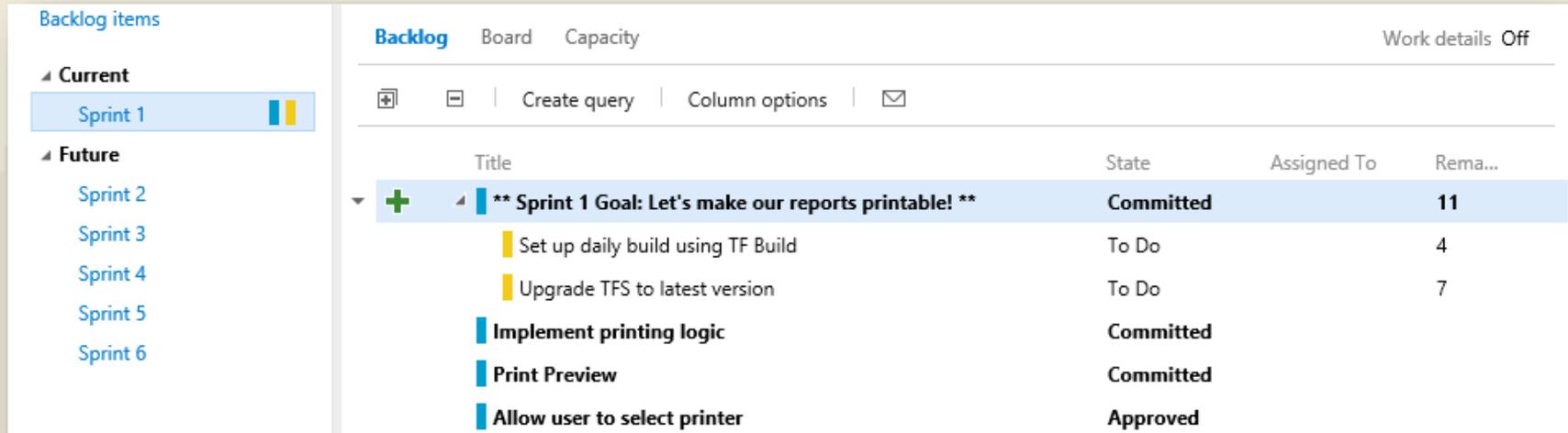
The screenshot shows a Jira interface for a Scrum project. On the left, a sidebar contains navigation options: 'Backlogs' (selected), 'Queries', 'Features', and 'Backlog items'. Under 'Current', 'Sprint 1' is selected. Under 'Future', 'Sprint 2' through 'Sprint 6' are listed. The main area displays 'ScrumProject Team Sprint 1' with a warning 'No iteration dates' and a 'Set dates' link. Below this, there are tabs for 'Backlog', 'Board', and 'Capacity', and a 'Work details Off' link. A toolbar includes icons for adding items, a calendar, 'Create query', 'Column options', and an email icon. The main content is a table with columns for 'Title', 'State', 'Assigned To', and 'Rema...'. Three items are listed:

Title	State	Assigned To	Rema...
Implement printing logic	Committed		
Print Preview	Committed		
Allow user to select printer	Approved		

Sprint Planning / Sprint-Ziel

Der TFS bietet keinen Ort um ein Sprintziel zu erfassen.

Mögliche Abhilfe:



The screenshot shows the TFS Backlog interface. On the left, a sidebar lists 'Backlog items' with 'Current' and 'Future' sections. 'Sprint 1' is selected under 'Current'. The main area shows a 'Backlog' view with a table of items. The first item is a goal: '** Sprint 1 Goal: Let's make our reports printable! **' with a state of 'Committed' and a remaining work of 11. Below it are several tasks with their own states and remaining work.

Title	State	Assigned To	Rema...
** Sprint 1 Goal: Let's make our reports printable! **	Committed		11
Set up daily build using TF Build	To Do		4
Upgrade TFS to latest version	To Do		7
Implement printing logic	Committed		
Print Preview	Committed		
Allow user to select printer	Approved		

Mehr zum Thema Sprint-Ziele: <http://urbanturtle.com/blog/2013/07/30/sprint-goal-whats-the-point/>

Sprint Planning / Sprint-Ziele – mit Urban Turtle

UrbanTurtle (\$) ist ein kommerzielles Plug-In für den TFS:

HOME CODE WORK BUILD TEST **URBAN TURTLE**
product backlog sprint backlog fast track estimation board **dashboard** configuration about

Dashboard

Sprint Goal
RELEASE 1



Delight potential customers with a fantastic account registration experience

Work Completed
RELEASE 1 / TAILSPIN TOYS

✓ Completed Work Items

ID	WORK ITEMS	PTS
2755	As a customer I should be ab	5
2756	As a customer I should be ab	3
2757	As a customer I should be ab	2
2758	As a customer I should be ab	1
2759	As a customer I should be ab	3
2760	As a customer I should be ab	8
2761	As a customer I should be ab	2

✗ Uncompleted Work Items

ID WORK ITEMS PTS

BUILD TEST **URBAN TURTLE**

custom boards estimation board dashboard product management configu



SPRINT 2 / TAILSPIN TOYS - April 17 to April 30
<Click here to set a sprint goal>

Filters ▾

2761

As a customer I should be able to remove items from my shopping car cart.
4

2775

As a store administrator I should be able to examine contact details for a customer.
2

2776

Design web front-end for viewing customer details
10 h

2777

Implement web front-end for viewing customer details

Sprint Planning / Teil II (Wie) – Team erstellt den Plan

ScrumProject Team Sprint 1

No iteration dates [Set dates](#)

Backlog Board Capacity Work details Off

Sprint Backlog

Features
Backlog items

Current

- Sprint 1

Future

- Sprint 2
- Sprint 3
- Sprint 4
- Sprint 5
- Sprint 6

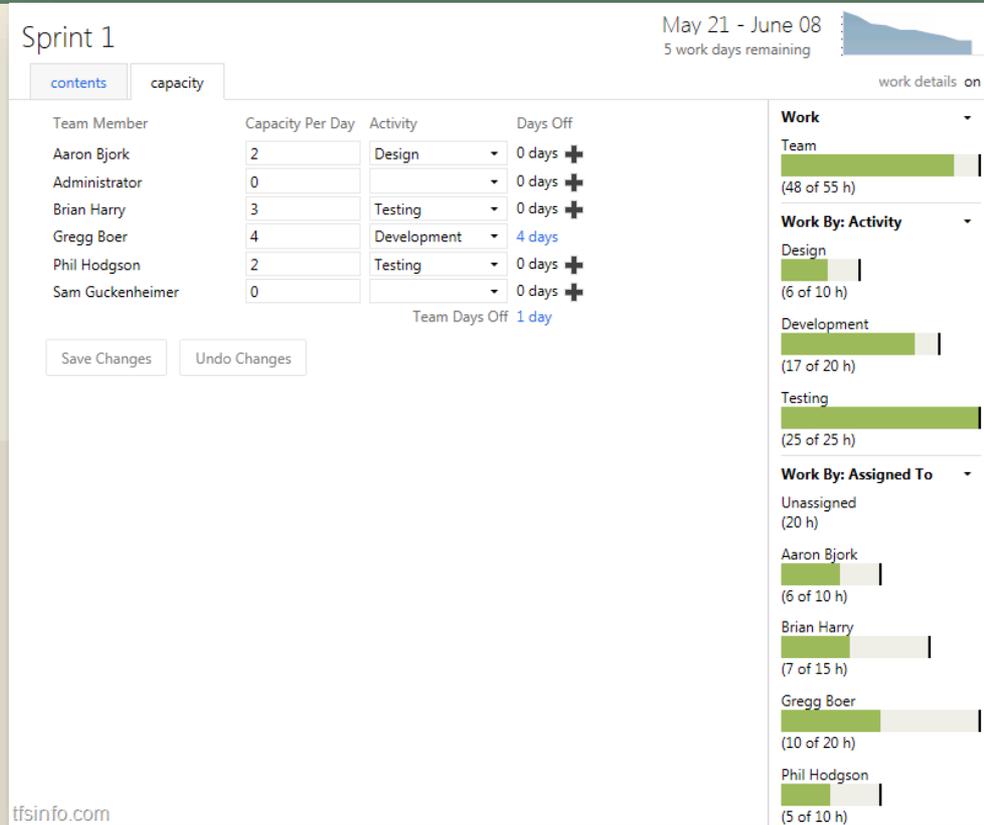
Title	State	Assigned To	Remaining Work
Implement printing logic	Committed		26
Implement backend logic	To Do	Neno Loje	7
Database Schema Changes	To Do		4
Update Business Layer	To Do		2
Create UI for new feature	To Do		3
Design test cases	To Do		4
Run test cases	To Do		5
Prepare Sprint Review	To Do		0.5
Check against Definition of Done	To Do		0.5
Print Preview	Committed		
Allow user to select printer	Committed		

Sprint Backlog

- Besteht aus den für den Sprint gewählten PBIs und dem Plan (Tasks) um das Sprintziel zu erreichen
- Wird größtenteils während der Sprint-Planung erstellt
 - Weitere Tasks bilden sich im Laufe des Sprints heraus
- Task-Größe: Nicht mehr als ein Tag
 - Teamschätzung

Sprint Planning / Part II (Wie) – Team-Kapazität

Kapazitätsplanung hilft dem Team den Plan (= Tasks) mit der verfügbaren Kapazität (für den Sprint) zu vergleichen.



Daily Scrum Meeting

- Max. 15-minütiges "Stand-Up"
- 3 Fragen
 - Was habe ich seit dem letzten Daily Scrum getan?
 - Was plane ich bis zum nächsten Daily Scrum zu tun?
 - Was hat mich bei der Arbeit behindert?
- Kein Projekt-Status-Meeting
- Kein Problemlösungsmeeeting
 - Themen für später "parken"!
- Product Owner sollte nicht teilnehmen



Daily Scrum / Task Board

The screenshot displays the Team Foundation Service (TFS) Scrum Board interface. The top navigation bar includes 'Team Foundation Service / Scrum' and the user 'Neno Loje (Instructor)'. The main area is titled 'Scrum Team Sprint 1' and shows a task board with columns for 'TO DO 14 h', 'IN PROGRESS 8 h', and 'DONE'. The board is organized into rows for Product Backlog Items (PBI B.1, B.2, B.3). PBI B.1 is currently in progress, with tasks like 'Create database', 'Design implementation of feature', 'Create UI for feature', 'Design test cases', and 'Execute test cases' distributed across the columns. PBI B.2 and B.3 are currently in the 'TO DO' column.

Team Foundation Service / Scrum | Neno Loje (Instructor)

HOME CODE WORK BUILD TEST

Backlogs Queries

Features *
Backlog items

Current
Sprint 1
Future
Sprint 2
Sprint 3
Sprint 4
Sprint 5
Sprint 6

Scrum Team Sprint 1

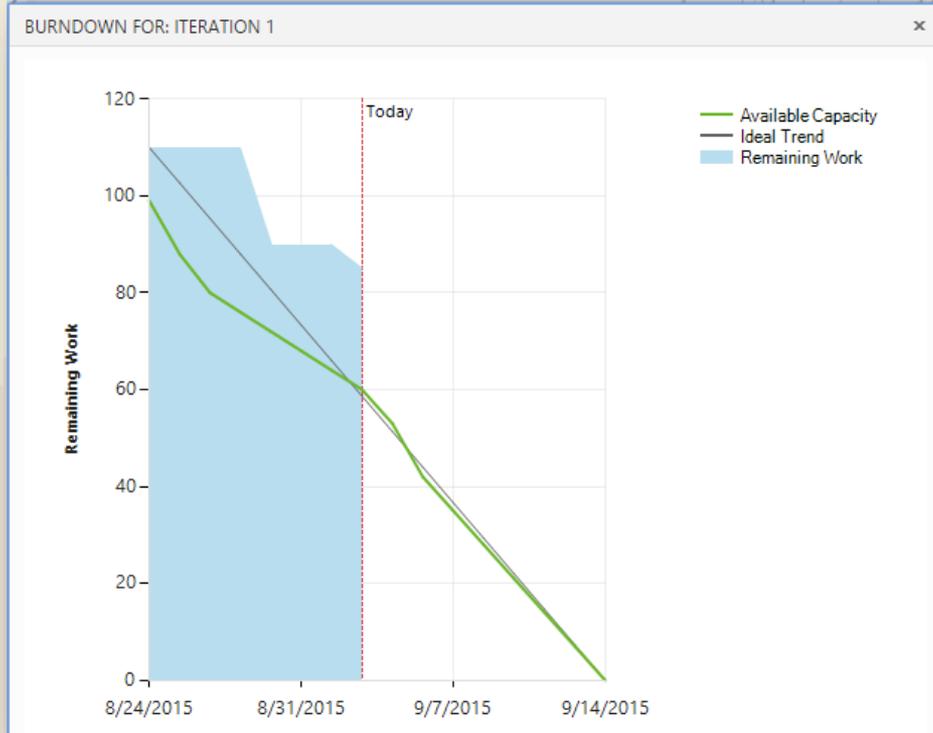
No iteration dates
Set dates

Backlog Board Capacity

Group by Backlog items Person All

	TO DO 14 h	IN PROGRESS 8 h	DONE
PBI B.1 19 h	<ul style="list-style-type: none">Create database (6)Execute test cases (2)	<ul style="list-style-type: none">Design implementation of feature (3)Create UI for feature (2)Design test cases (6)	<ul style="list-style-type: none">Review architectural design of feature
PBI B.2	<ul style="list-style-type: none">Review design of feature		
PBI B.3 3 h	<ul style="list-style-type: none">Review design of feature (3)		

Daily Scrum / Burndown-Diagramm



Noch zu leistende Arbeit
pro Tag

Der Sprint (= Iteration)

- Die Arbeitszeit, in der das Team ein Inkrement lauffähiger Software erstellt
- So kurz wie möglich aber nicht kürzer (2-4 Wochen)
- Strikter Zeitrahmen
- Hat täglich ein **Daily Scrum Meeting**
- Beginnt mit einem **Sprint Planning Meeting**
- Endet mit einem **Sprint Review Meeting** und einem **Sprint Retrospective Meeting**
- Währenddessen: **Product Backlog Refinement(s)**



Development

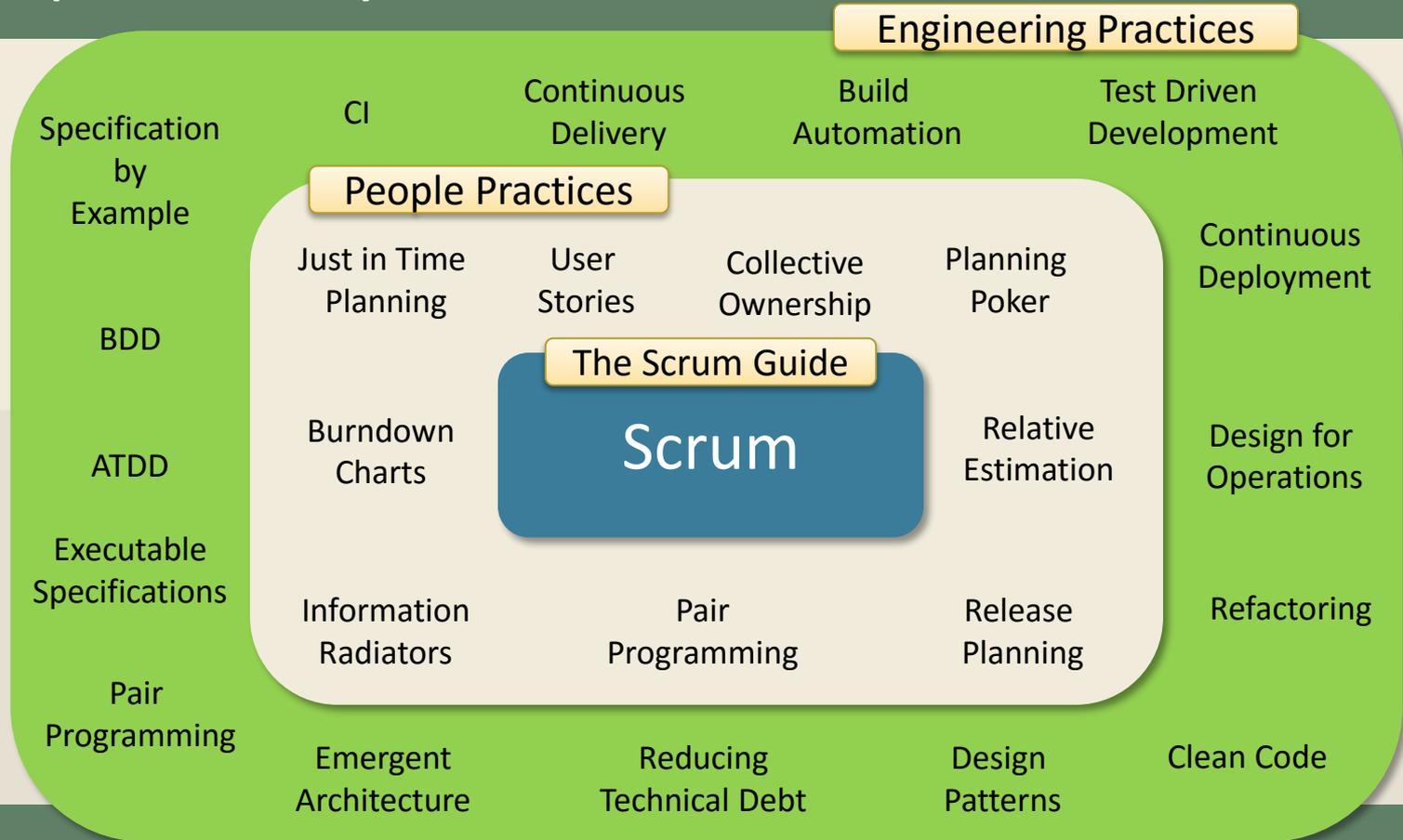
- Development Team
 - konzentriert sich auf das Erreichen des Sprint-Ziels
 - arbeitet autonom und selbstverwaltend
- Die abgegebene Arbeit entspricht dem Standard der 'Definition of Done'
- Minimale Unterbrechungen
- Keine Änderungen an den im Sprint befindlichen PBIs (während eines Sprints)

Der Durchfluss im Fokus / "Kanban" Board

The image shows a Kanban board interface with the following structure:

- Backlog**: Contains three cards assigned to Aaron Bjork.
 - 138 Filtering on the new column on the Kanban board (3)
 - 147 Metrics on all cards on the board - start with lead time and cycle time. (8)
 - 125 Options for bugs on Taskboards - similar to Tasks (5)
- In Progress** (5/5):
 - Doing**:
 - 145 Conditional formatting on all card types - visually rich (2) - Assigned to Noah Munger. Tags: Extensibility, Kanban.
 - 195 Error occurring after submit of a new item from a mobile device (1) - Assigned to Lowell Steel. Tag: Kanban.
 - 162 Expedite lane configuration - including renaming the lane (3) - Assigned to Christina Kelly.
 - Done**:
 - 136 Swim lanes on the Kanban board - expedite is the classic example (1) - Assigned to Aaron Bjork. Tags: Kanban, Taskboard.
 - 124 New layout for cards that gets us ready for more data on the cards (3) - Assigned to Christina Kelly.

Complementary Practices



Development / Definition of Done

Wann sind wir fertig?

- Explizite "Definition of Done" (DoD)
- Konstante (Mindest-)Qualität
- Basis für Schätzungen
- Beeinflusst von unternehmensweiten Richtlinien
- Messbar
- Automatisiert

Sprint Review Meeting

- Review des **Sprint-Ziels** und der prognostizierten **PBIs**
- Development Team präsentiert die “**fertige**” Arbeit
 - Unfertige Arbeit wird nicht gezeigt
- Nur Software (kein PowerPoint)
- Jeder ist willkommen (Scrum Team, Kunden, Management, etc.)
- Zeitlich begrenzt
- Keine perfekte Präsentation nötig (Vorbereitungsaufwand)
- Tipp: Demoskript verwenden

Sprint Review / Microsoft Feedback Client

Start Provide **Submit**

THANK YOU
We appreciate the time you took to provide us feedback.

✔ Customer Creation Process
Can we add our partner logo below the video?
★★★★☆
[review feedback](#)

Your feedback will be saved to:
Server: <http://localhost:8080/tfs/defaultcollection>
Project: Scrum

[Previous](#) [Submit and Close](#)

Sprint Retrospective Meeting

- Das gesamte Scrum Team nimmt teil
 - ... und niemand sonst
- Was haben wir erreicht?
- Was lief gut?
- Was könnten wir verbessern?
- Metriken durchsehen
- Konkrete Maßnahmen für nächsten Sprint
- Jeder sollte sich einbringen

Sprint Retrospective / Wohin mit den Ergebnissen?

Im TFS gibt es dafür keinen Platz, aber es ist ratsam die Ergebnisse für alle gut sichtbar zu notieren (z.B. an einer Wand).

Sprint-Nr.	Was lief gut (😊)	Was nicht (😞)	Im nächsten Sprint ändern
Sprint 1	Haben das Sprint-Ziel erreicht!	Einige fachliche Missverständnisse	Wir sollten mehr nachfragen!
Sprint 2	Engere Zusammenarbeit mit Product Owner funktionierte gut!	Einige Probleme mit dem Build und fehlschlagenden Tests	Grundursache für fehlerhafte Tests herausfinden!
...

Sprint Retrospective / Impediments

Open Impediments

5 work items (1 selected)

Results

Editor

Charts

Work item pane Bottom

 Save query      | Column options 

ID	Work Item...	Title	Assigned To	State	Priority	Created Date
46	Impediment	Visuals are not complete for the login screen	Neno Loje	Open	2	5/26/2014 5:33:50 PM
47	Impediment	Power outage on Friday		Open	2	5/26/2014 5:33:56 PM
48	Impediment	Some unit tests are wacky (failing now and then)		Open	2	5/26/2014 5:34:00 PM
49	Impediment	Missing unit tests in many important components		Open	2	5/26/2014 5:34:06 PM
50	Impediment	Motivation is low during Sprint Retrospectives on Fridays		Open	2	5/26/2014 5:34:14 PM

Impediment 46: Visuals are not complete for the login screen

1 of 5

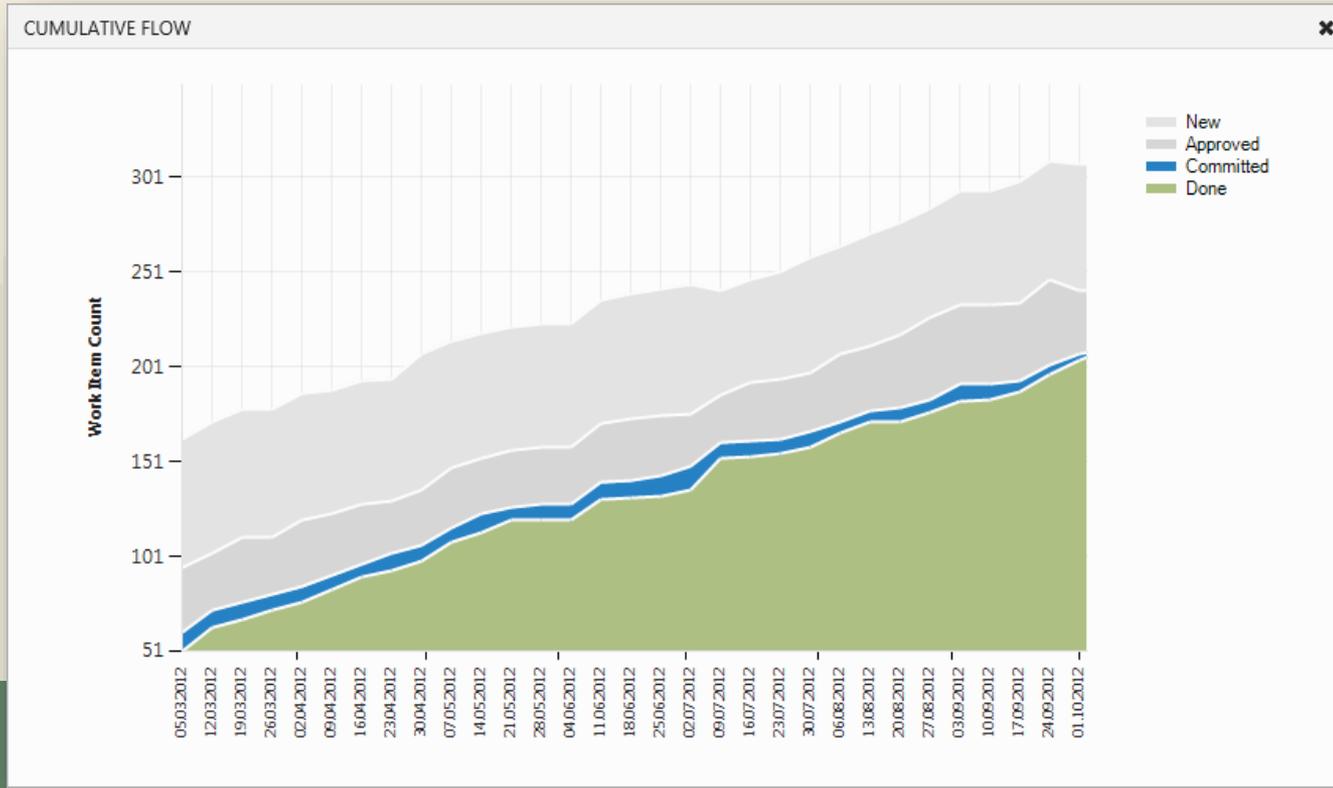
Tags

Visuals are not complete for the login screen

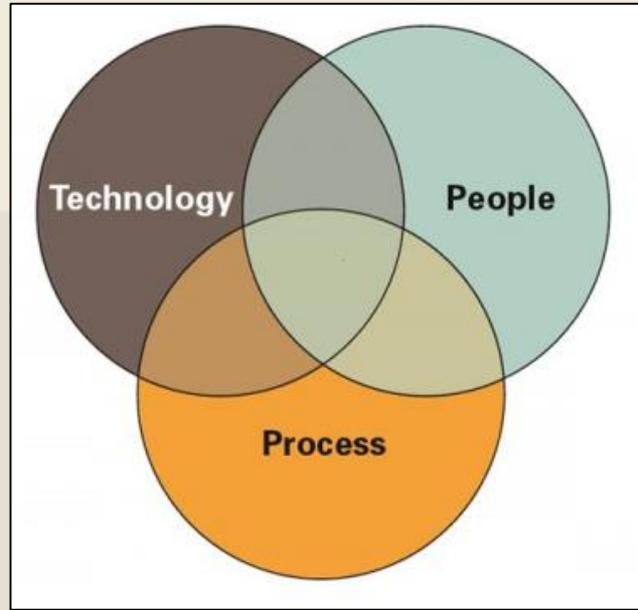
Iteration

Durchfluss im Fokus: Cumulative Flow Diagram (CFD)

Visualisiert den Fluss der PBIs durch das System



Zusammenfassung



Mehr zum Thema Scrum?

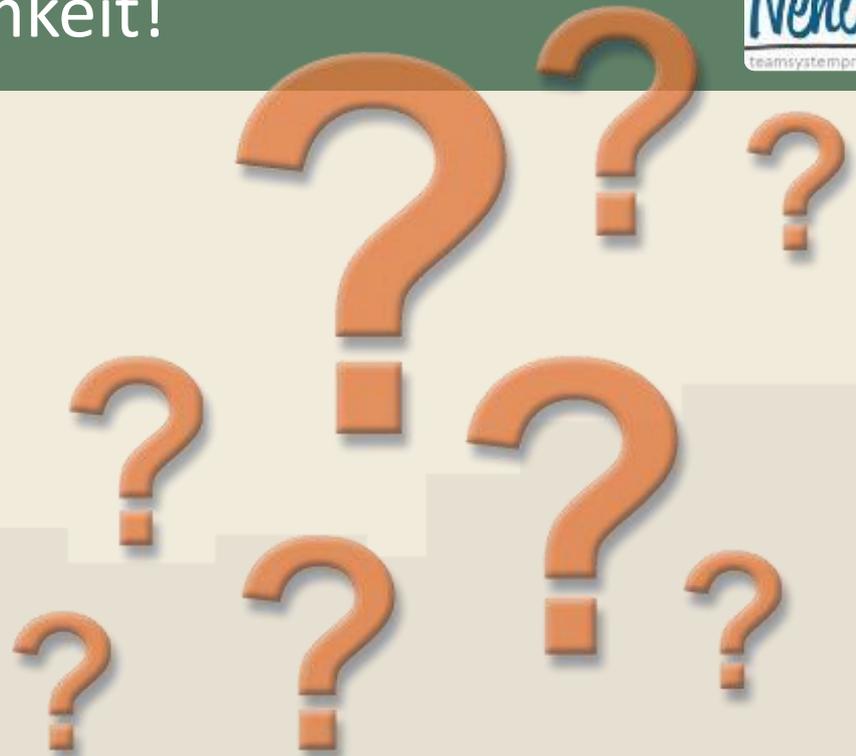
- **Professional Scrum Developer™ Program:**
<https://www.scrum.org/Courses/Professional-Scrum-Developer>
- Video: **Product Ownership in a Nutshell**
<https://www.youtube.com/watch?v=502ILHjX9EE>
- Video: **Scrum at Microsoft: See the TFS Agile Team do a Scrum**
<http://tv.ssw.com/1279/daily-scrum-at-microsoft>
- Video: **What is a 'Scrum Master'? – Scrum Guide**
<http://tv.ssw.com/4772/scrum-what-is-a-scrum-master>
- Video: **Scrum Master - Funny movie about The Power of Scrum**
<https://www.youtube.com/watch?v=P6v-l9VvTq4>

Buchempfehlungen zu Scrum & TFS

- **Professional Team Foundation Server 2013**
The definite reference for TFS. A "must-have".
- **Visual Studio Team Foundation Server 2012: Adopting Agile Software Practices: From Backlog to Continuous Feedback** (3rd Ed)
Written by the Product Owner of Visual Studio and Europe's first MVP for TFS this book is recognized as a de facto guide for teams adopting agile practices.
- **Professional Scrum Development with Microsoft Visual Studio 2012**
Scrum, Agile Practices and Tools that make a Professional Scrum Developer.
- **Testing for Continuous Delivery with VS 2012** (Free download)
This book is aimed at test engineers, managers, developers, and folks interested in understanding the changing world of test.

For the latest version, see: <http://teamsystempro.com/go/tfsbooks.aspx>

Danke für die Aufmerksamkeit!



Gleich im Anschluss oder per E-Mail an:
Neno@TeamFoundationServer.de

Neno Loje

Freier Berater | Trainer | Coach

für Team Foundation Server, Visual Studio ALM,
& moderne Entwicklung (Scrum und DevOps)

Neno@TeamFoundationServer.de

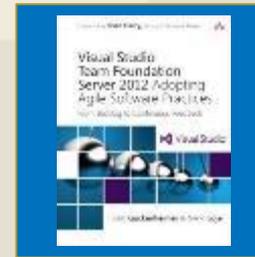
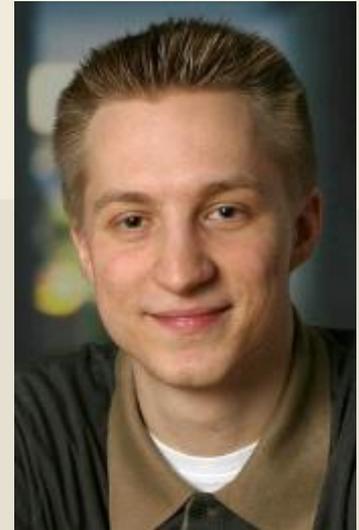
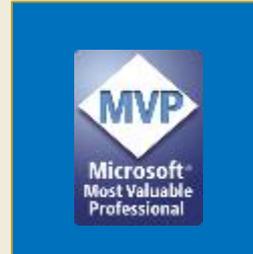
Webseite: <http://www.nenoloje.de>

Buch: <http://www.nenoloje.de/buch>

Schulungen: <http://www.tfscamp.de>

Blog [EN]: <http://www.nenoloje.de/tfsblog>

Blog [DE]: <http://www.nenoloje.de/meinblog>



Über Neno Loje

- Neno unterstützt Unternehmen und Teams **moderner** und **agiler** zu werden.
- Seine Schwerpunkte sind **Scrum**, **TFS** und **DevOps**.
- Auch die Einführung des **Team Foundation Servers** – von der Entscheidung über die Migration bis zur individuellen Anpassung.
- Besonders stolz ist er auf den **Professional Scrum Developer**-Kurs, dem Ausbildungsprogramm für Scrum-Teammitglieder.
- Neno ist seit 2010 Referent beim **Herbstcampus**.

Neno Loje

Team Foundation Server (TFS)

Application Lifecycle Management (ALM)

Moderne Softwareentwicklungsmethoden (Scrum)