

# Planning & Tracking Your Team's Work

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**Benjamin Day**

TRAINER | COACH | DEVELOPER

@benday [www.benday.com](http://www.benday.com)



# Overview



## Scrum & Kanban Overview

## TFS Process Templates

### Demos

- Kanban with TFS
- Scrum with TFS
- Backlog Management
- Sprint Planning
- Sprint Management
- Work Item Queries
- Project Dashboards
- Follow Work Item
- Lead Time & Cycle Time with Excel
- Work Item Customization



In a DevOps world,  
you want a comfortable  
understanding of what's  
happening for work.



Plans will change and  
mistakes are going to  
happen.



What's your methodology?



Scrum, Kanban, or a hybrid?  
TFS can help.



# Kanban or Scrum?

## Kanban

Ticket-based?

Feels like manufacturing or  
assembly line?

Maintenance-oriented?

Limited knowledge of what's coming  
up?

Solid understanding of  
the what & how?

## Scrum

Feature-oriented?

More work than you could ever dream  
of getting done?

Work needs prioritization by someone?



# Kanban

Toyota

Taiichi Ohno






1950's

Meaning: “billboard”

















# Kanban Board

To Do	Dev	Ready for Test	Testing	Done
				















# Kanban Board

To Do	Dev	Ready for Test	Testing	Done
4	2	2	3	
   	 	 	  	



# Kanban Board

To Do	Dev	Ready for Test	Testing	Done
4	2	2	3	
   	 	 	  	

Goldratt's Theory of Constraints

Step #3:

*"Subordinate all other activities to the constraint"*



# Scrum

“Working software in 30 days or less”

Co-created by Ken Schwaber & Jeff Sutherland

1990's

Lightweight process



# Scrum in the Pluralsight Library



## **Scrum Master Skills**

Module 1 | Chapter 2 | Scrum Overview

**6 min**



## **Real World Scrum With Team Foundation Server 2013**

Module 1 | Chapter 2 | Scrum Overview

**43 min**



## **Scrum Fundamentals**

by David Starr

**3.5 hours**



## **Scrum Master Skills**

by Benjamin Day

**4 hours**



# Basic Scrum Nouns

## Roles

- Product Owner
- Scrum Master
- Development Team

## Events

- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective

## Artifacts

- Product Backlog
- Sprint Backlog
- Increment



# Scrum

## Sprints

- Increments

Maximum of 30 days




Product Backlog is the wishlist for the future

Sprint Backlog is the planning & tracking related to Sprint

Scrum Board



# Scrum Board

	TO DO	IN PROGRESS	DONE
PBI A			
PBI B			
PBI C			





In the rest of the module:  
Scrum, Kanban, and TFS to  
track/plan work in your  
DevOps flow.



Next up:  
TFS Process Templates



# TFS Process Templates



# Process Templates

## Out-of-the-box

- Agile
- Scrum
- CMMI

**Determines initial contents/setup  
of your Team Project**

**Agile Development → Agile or Scrum**

## Work Items

- Project management
- Pieces of tracked work



# Work Items

Agile	Scrum
User Story	Product Backlog Item
Task	Task
Bug	Bug
Issue	Impediment
Feature	Feature
Test Case	Test Case



# Work Item States on Requirements

## Agile: User Story

Good idea

New

Start work

Active

Completed

Resolved

Acceptance  
Tested

Closed

## Scrum: Product Backlog Item

New

Unverified  
idea

Approved

Good idea

Committed

Team starts  
work

Done

Potentially  
Shippable



# Lead Time & Cycle Time



Lead Time:  
Time from request to delivery



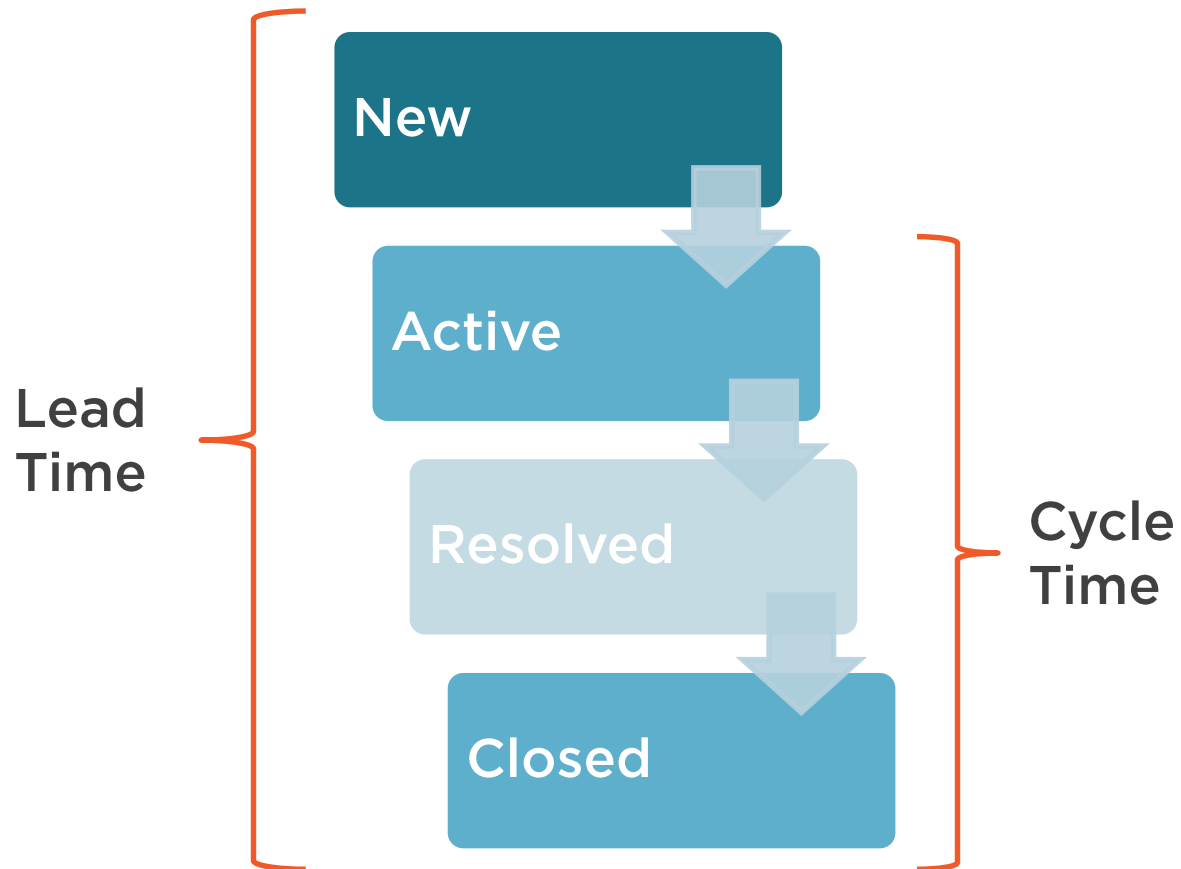


Cycle Time:  
Team starts work to delivery

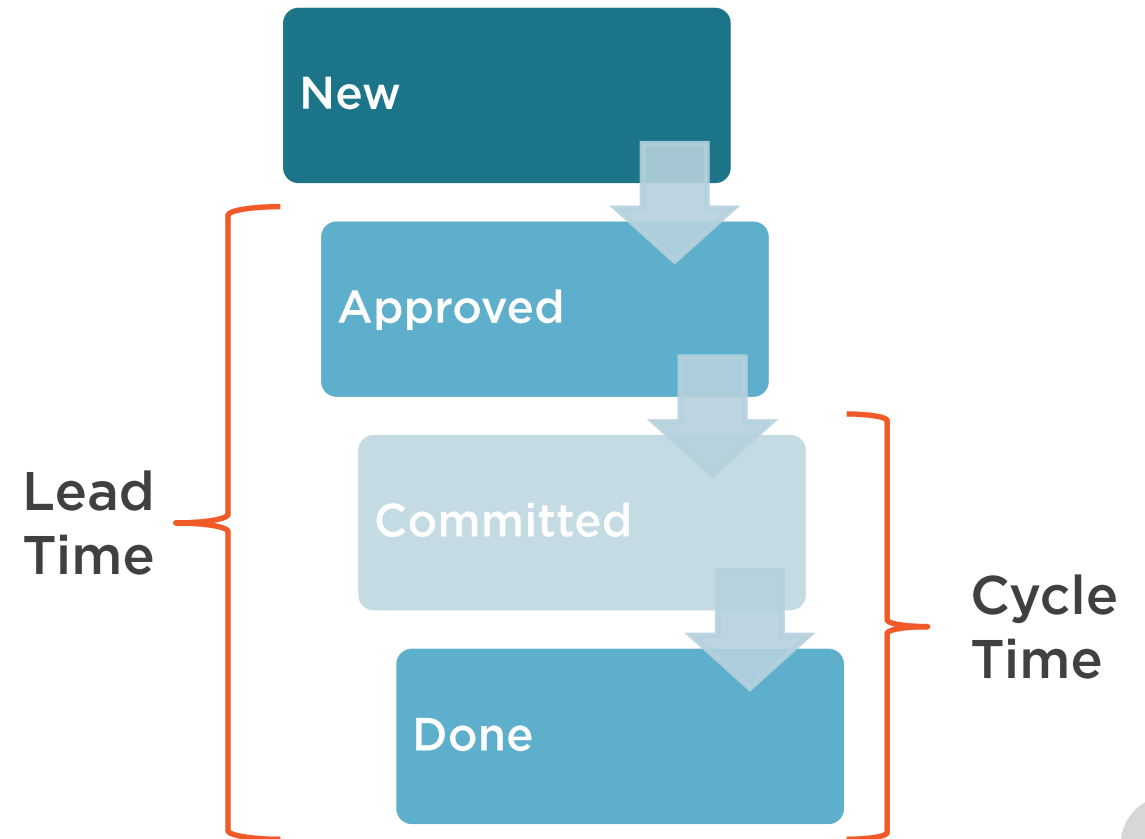


# Requirement States, Lead Time, & Cycle Time

## Agile: User Story



## Scrum: Product Backlog Item



Next up:  
Planning & Tracking in TFS  
using Kanban



# Demo



## Kanban with Team Foundation Server



Next up:  
Use TFS to Manage a  
Scrum Product Backlog



# Demo



## Manage a Scrum Product Backlog



# Estimation in Scrum



## Scrum Master Skills

Module 2 | Tighten up Your Scrum Process



Next up:  
Forecasting & Velocity





# Demo



## Forecasting & Velocity



# Velocity in Scrum

A promotional banner for the 'Scrum Master Skills' course. The background is a dark, textured image of a person working. The text is white and orange. The title 'Scrum Master Skills' is large and prominent. Below it, 'by Benjamin Day' is written in a smaller font. A paragraph describes the course's purpose. At the bottom, there are four interactive elements: a 'Resume Course' button, a 'Bookmarked' status, an 'Add to Channel' option, and a 'Live mentoring' feature.

**Scrum Master Skills**

by Benjamin Day

This course will help you develop the skills of a great Scrum Master.

[▶ Resume Course](#)  Bookmarked  Add to Channel  Live mentoring



## Scrum Master Skills

Module 2 | Tighten up Your Scrum Process



Next up:  
Use TFS to Plan a  
Sprint Backlog



# Demo



## Plan a Scrum Sprint



Next up:  
Use TFS to Facilitate Your  
Daily Scrum



# Demo

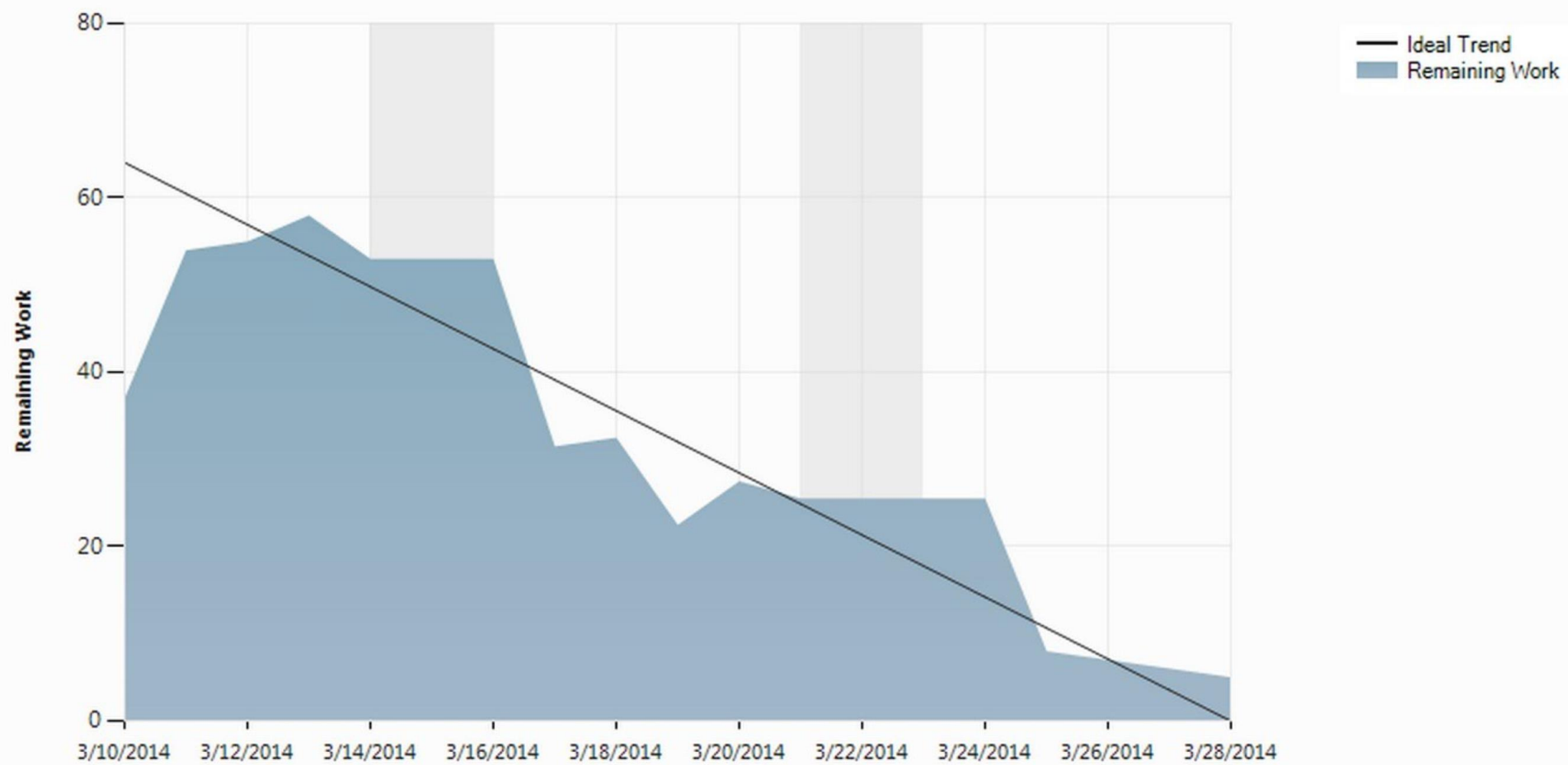


Daily Scrum meeting

Plan, manage, & track day-to-day work



## BURNDOWN FOR: SPRINT 3



Next up:  
Use a TFS Dashboard  
to Visualize Progress





# Demo



Use a dashboard to visualize status



Next up:  
TFS Work Item  
Queries & Charts



# Demo



TFS Work Item Queries

TFS Work Item Query Charts



Next up:  
Follow Work Item



# Demo



## Follow Work Item



Next up:  
Lead Time & Cycle Time  
using Excel



# Calculate Lead Time & Cycle Time using Excel & TFS



Open a Work Item Query  
using Excel →  
Calculate in Excel





It works by default with the  
Agile process template.

Scrum template requires  
customization.



# Work Items, Work Item Fields, & State Transitions

**Work items are made up of Fields**

**Field = piece of data in a Work Item**

**Fields have a “refname”**

- System.Id, System.Title
- Microsoft.VSTS.Common.\*

**System.State**

- Agile: New, Active, Resolved, Closed
- Scrum: New, Approved, Committed, Done

**States have Transitions**

- Custom actions



# Lead & Cycle Time Data in TFS

## Tracking requirements

### Agile Process Template

- User Story work item type

### Scrum Process Template

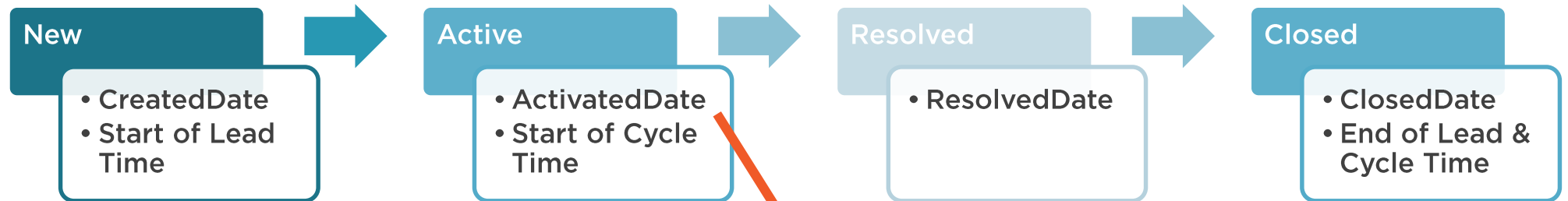
- Product Backlog Item work item type



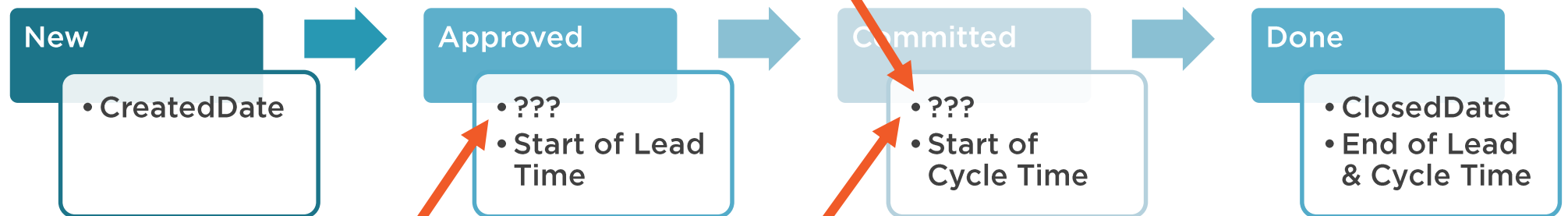
# Required Data & State Transitions

## Agile Process Template: User Story

Field "refnames" all start with Microsoft.VSTS.Common.\*



## Scrum Process Template: Product Backlog Item



Benday.Scrum.ApprovedDate

Microsoft.VSTS.Common.ActivatedDate



# Customize TFS Work Items

## Work items are XML

- Work Item Type Definition
- WITD

## witadmin.exe

## witadmin exportwitd

- Download WITD

## Edit the WITD

## witadmin importwitd

- Upload the customized WITD



Next up:  
Customize TFS to get  
Lead & Cycle Time



# Demo



## Part 2

Customize Scrum Process Template

Lead Time

Cycle Time

Open a Work Item Query in Excel



# Summary



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Next up:  
Automating Builds

