

# Agile Boards

Plan, track, and discuss work across teams.

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US Midwest Region



<https://docs.microsoft.com/en-us/azure/devops>

<https://devblogs.microsoft.com/devops/azure-boards-summer-update/>

# Agenda

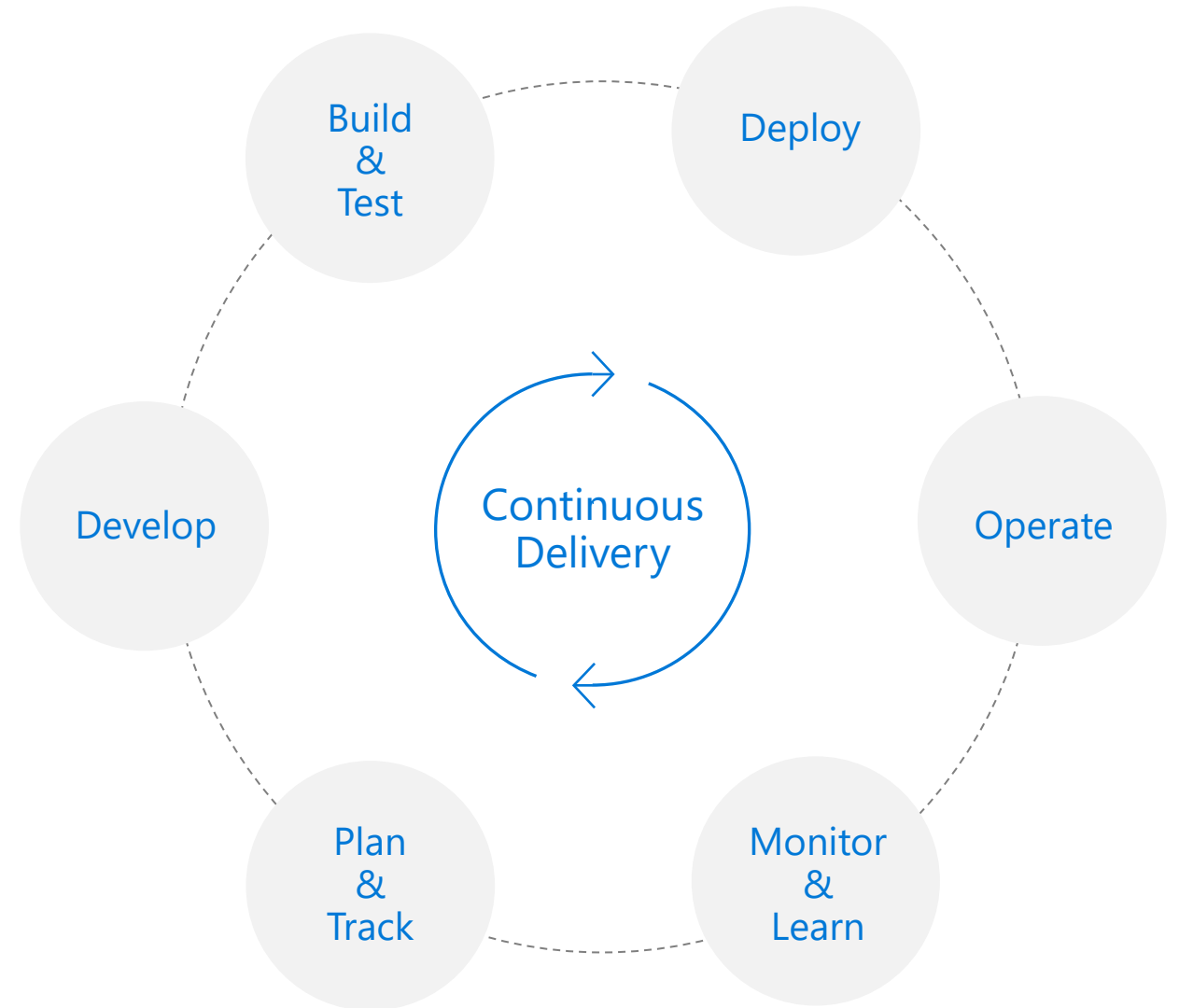
- What is DevOps?
- How does Microsoft use DevOps?
- Why Does DevOps Matter?
- Agile Terminology
- Agile Boards Walkthrough
- Reports & Widgets based on Analytics
- Resources

# What is DevOps?

People. Process. Products.



DevOps is the union of **people**, **process**, and **products** to enable continuous delivery of **value** to your end users. ”

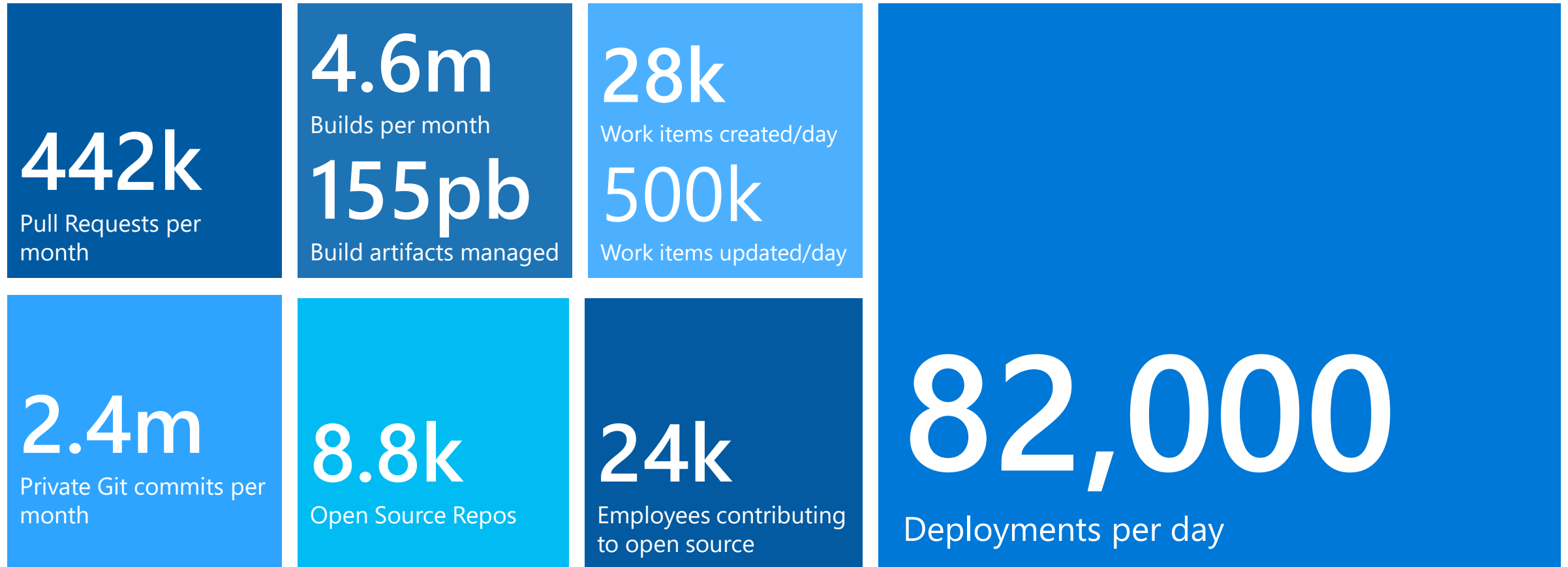


How does Microsoft use DevOps?

# DevOps at Microsoft

Azure DevOps is the toolchain of choice for Microsoft engineering with over 110,000 active internal users

 <https://aka.ms/DevOpsAtMicrosoft>





# One Engineering System with Azure DevOps



Why does DevOps Matter?



# Business Needs



Drive  
innovation



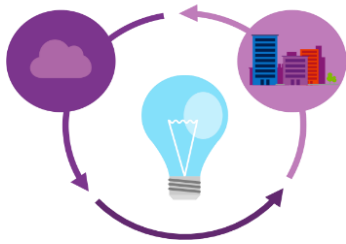
Reach and  
engage



Accelerate  
time-to-market while  
reducing costs



# What needs to change to address those needs?



**Shorten** cycle times  
and deliver value  
faster



Improve **quality**  
and availability



**Optimize** resources  
and eliminate waste



Deliver **innovation**  
**and great customer**  
**experience** through  
experimentation

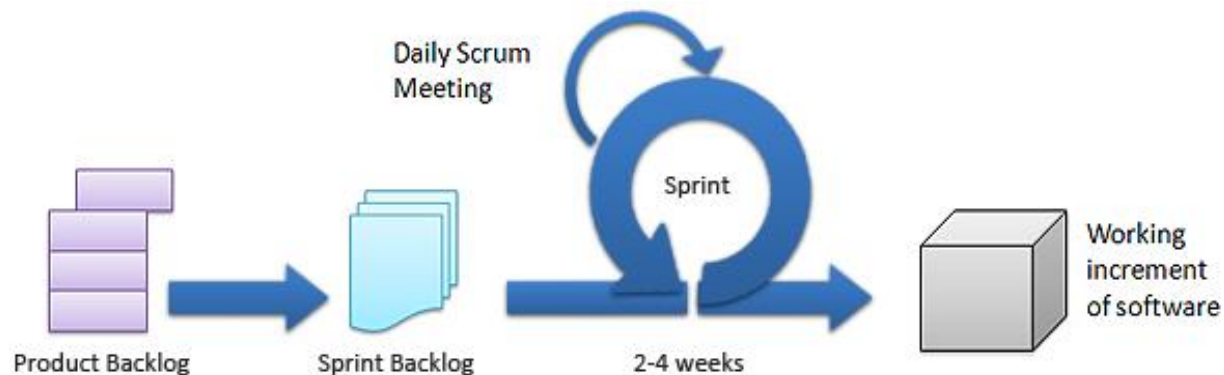
# Agile Methodology Terms and Definitions





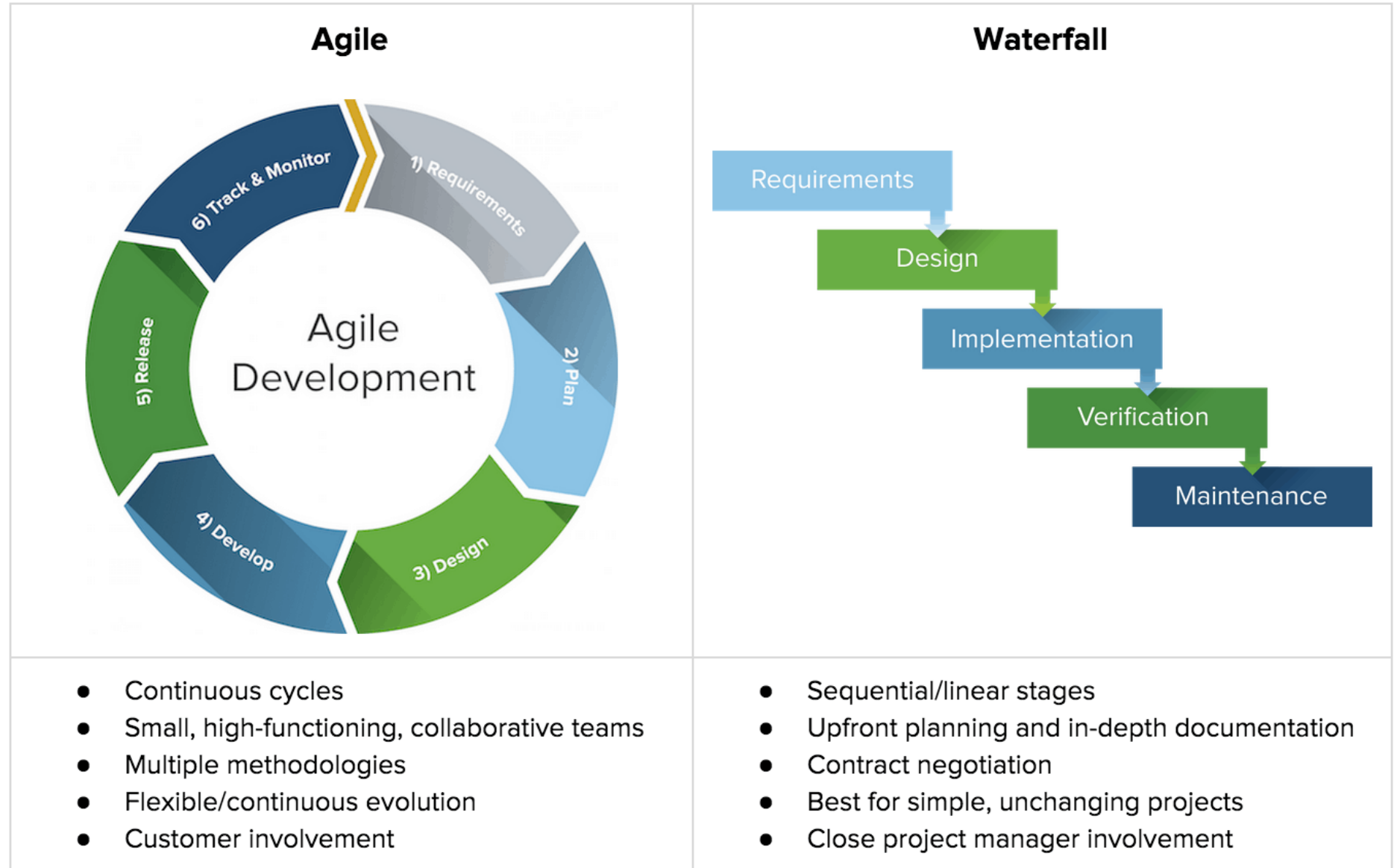
# Agile Methodology Terms and Definitions

Scrum	Agile	Definition
Sprint	Iteration	Fixed-length period of time
Release	Small Release	Release to production
Sprint/Release Planning	Planning Game	Agile planning meetings
Product Owner	Customer	Business representative to project
User Story	User Story	Brief explanation of the who, what, and why
Tasks	Tasks	Items that need to be completed
Retrospective	Reflection	"Lessons learned" style meeting
Scrum Master	Coach	Agile project manager
Development Team	Team	Empowered cross-functional team
Daily Scrum	Daily Standup	Brief daily status meeting



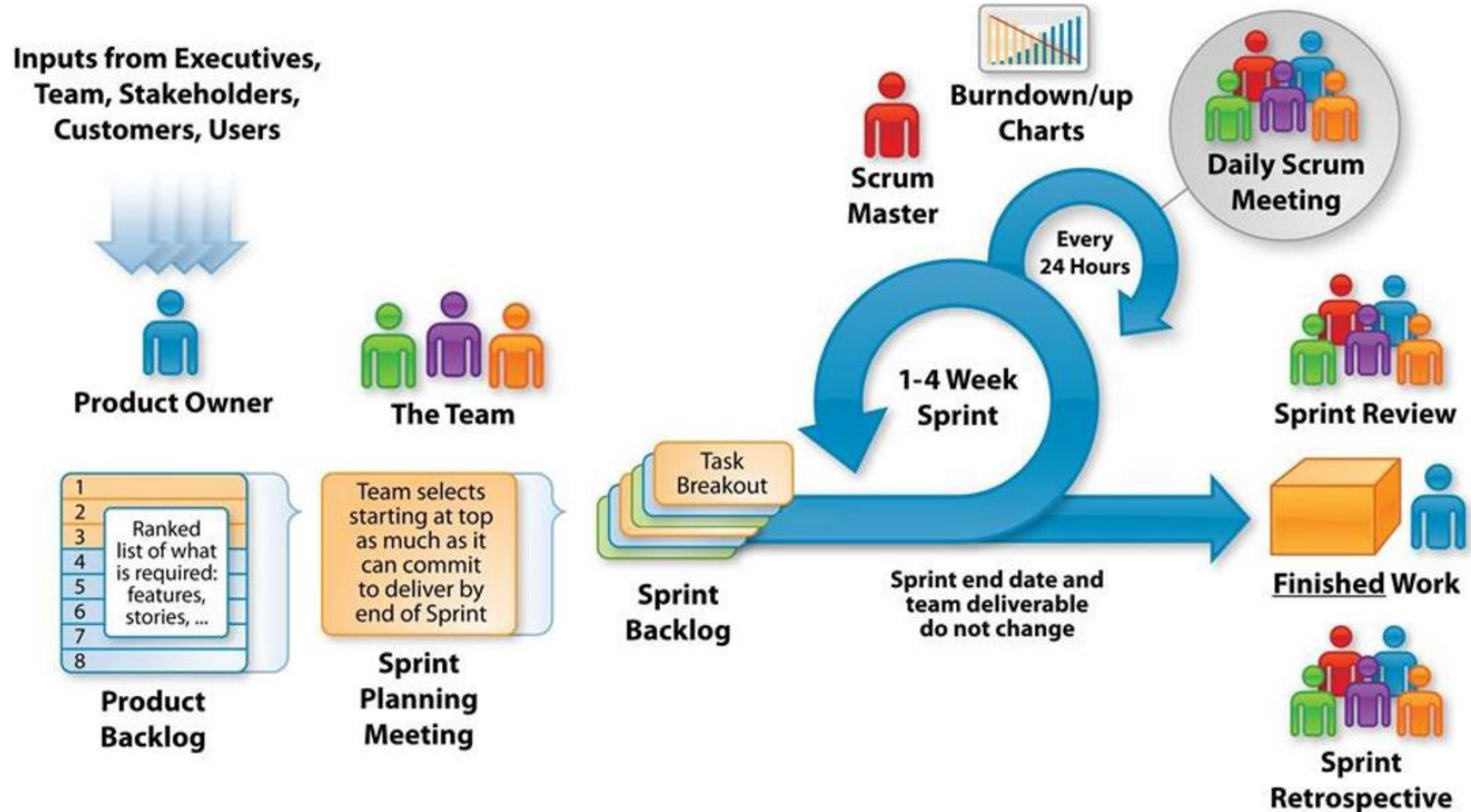
# What is Agile?

Agile is the ability to create and respond to change.



# What is Scrum?

## Scrum Basics



# The Enterprise Collaboration Solution



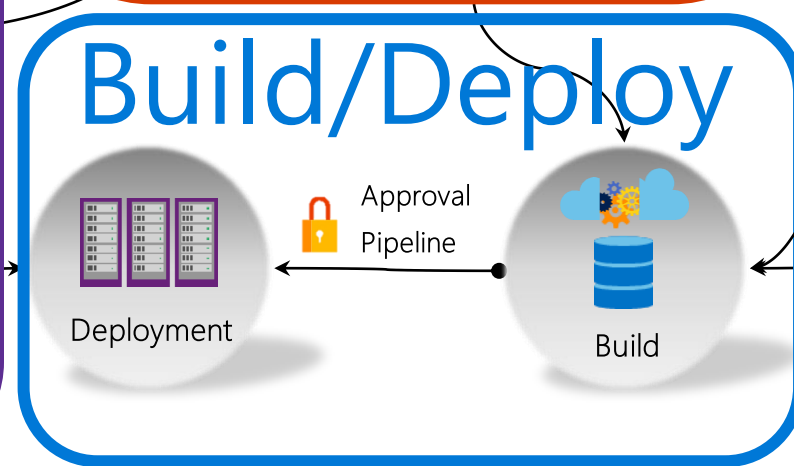
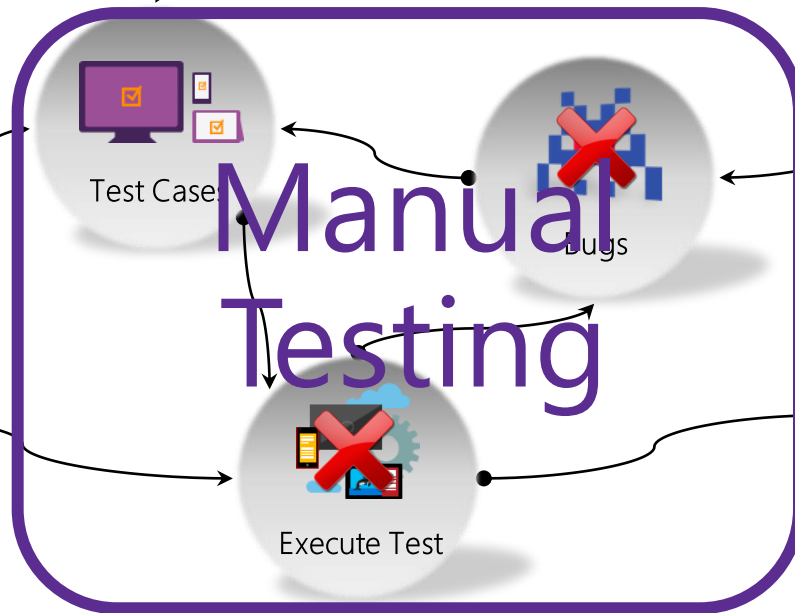
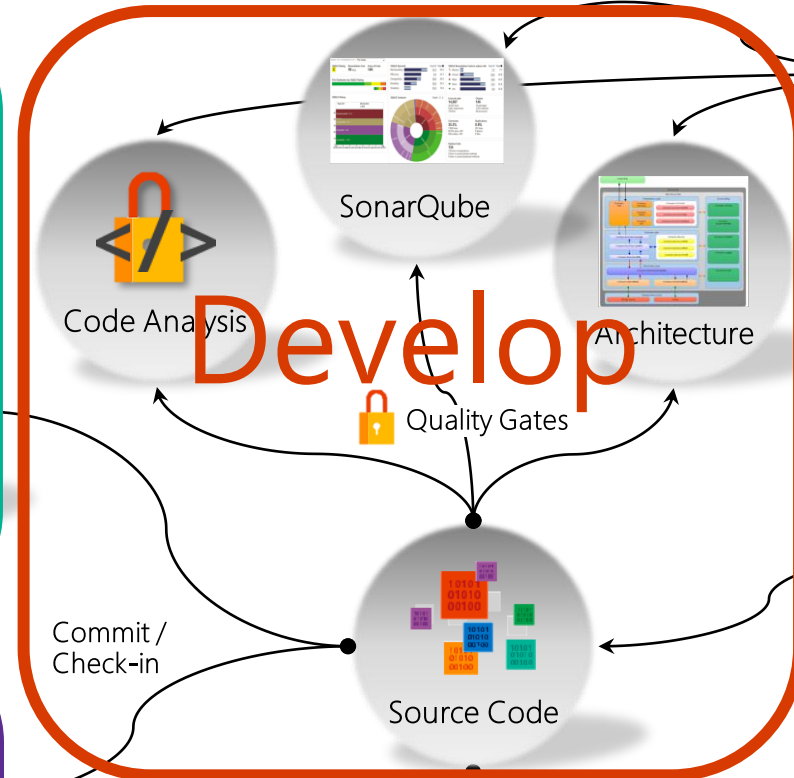
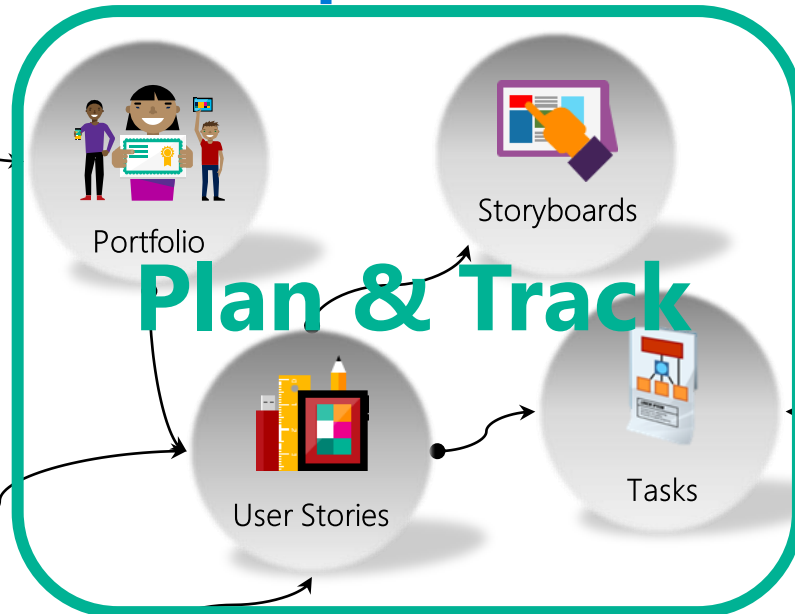
Project Manager



Business Analyst / Product Owner



Quality Analyst



Project Lead



Developer



IT/Operations



# The Enterprise Collaboration Solution



Project Manager




Business Analyst / Product Owner



Quality Analyst

## Plan & Track



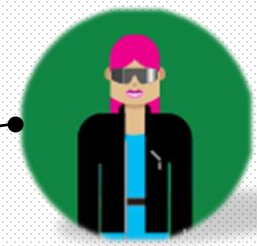

## Manual Testing



## Develop



## Build/Deploy



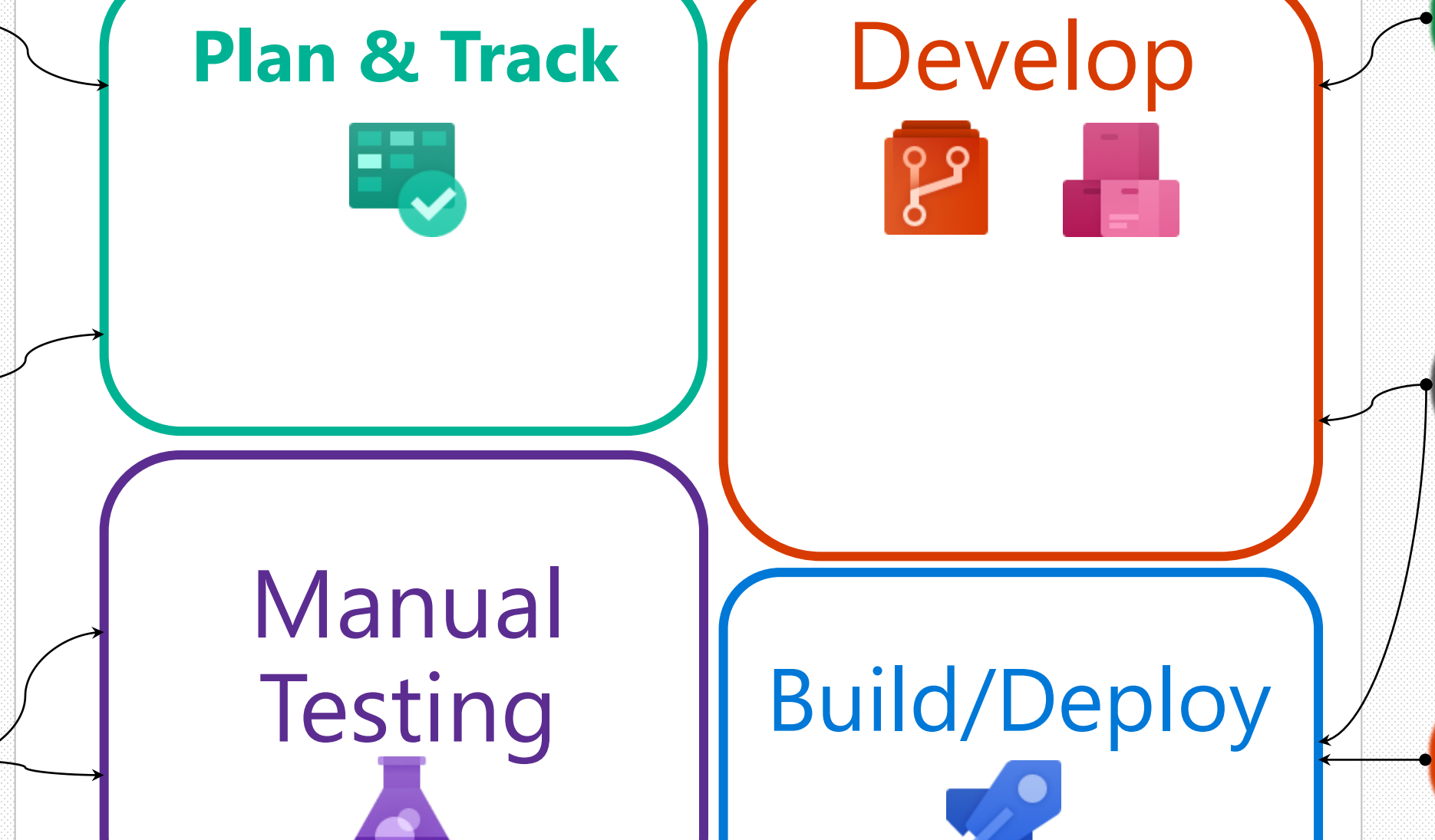
Project Lead



Developer



IT/Operations



# Introducing Azure DevOps



## Azure Boards

Deliver value to your users faster using proven agile tools to plan, track, and discuss work across your teams.



## Azure Pipelines

Build, test, and deploy with CI/CD that works with any language, platform, and cloud. Connect to GitHub or any other Git provider and deploy continuously.



## Azure Repos

Get unlimited, cloud-hosted private Git repos and collaborate to build better code with pull requests and advanced file management.



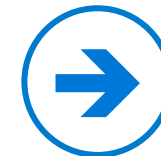
## Azure Test Plans

Test and ship with confidence using manual and exploratory testing tools.



## Azure Artifacts

Create, host, and share packages with your team, and add artifacts to your CI/CD pipelines with a single click.

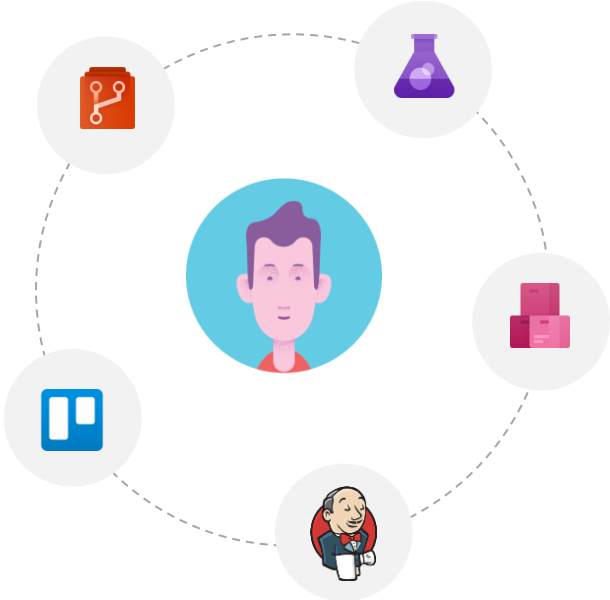
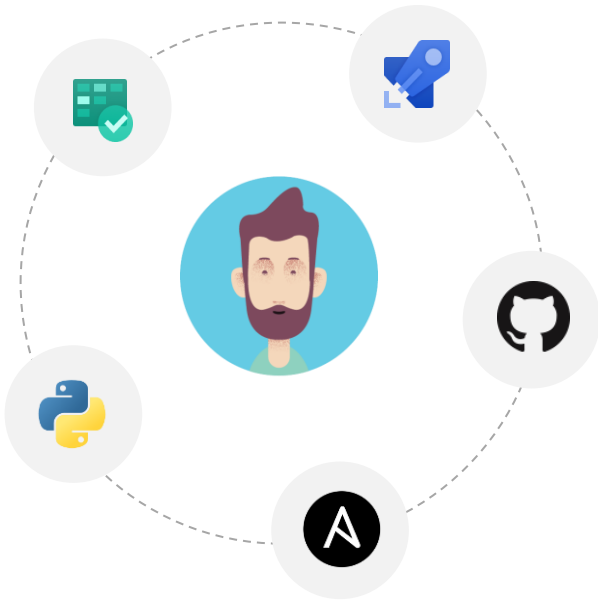


<https://azure.com/devops>

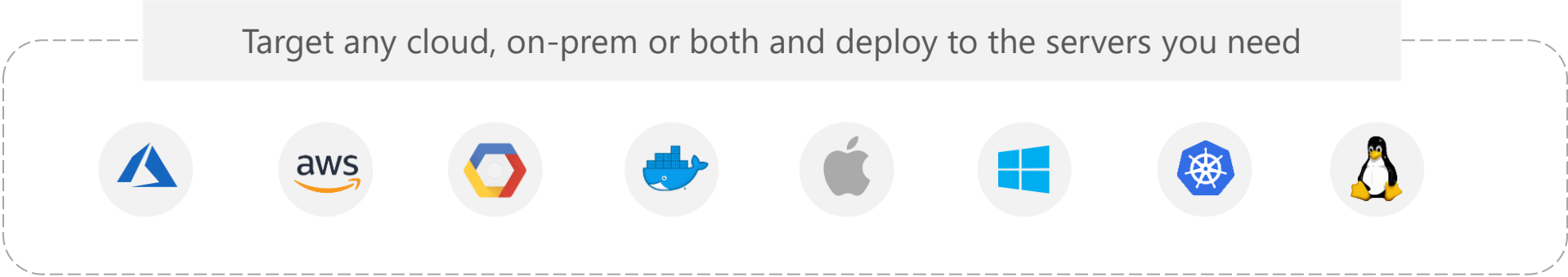
# Azure DevOps: Choose what you love

Any Language, Any Platform

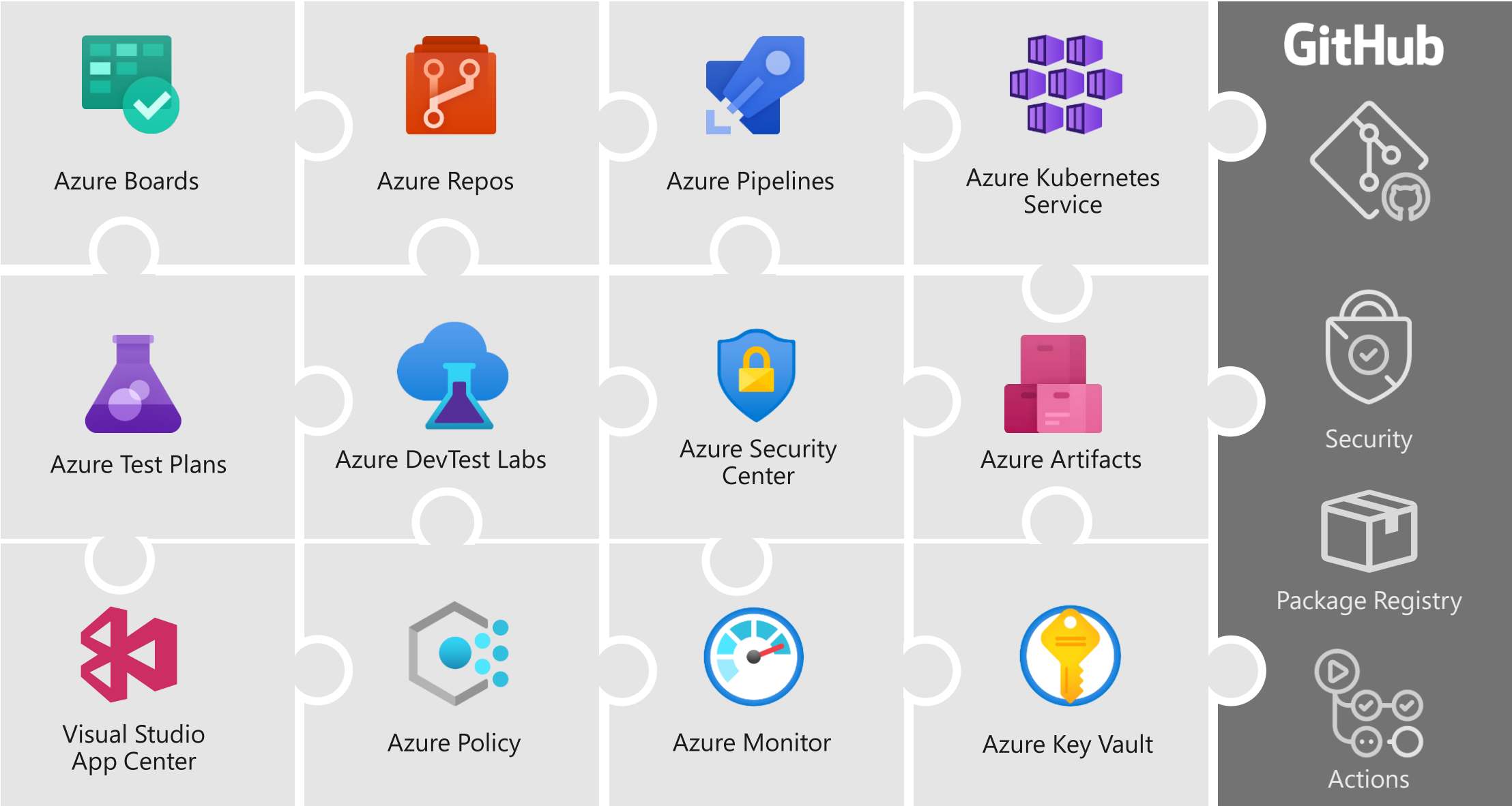
Azure DevOps lets developers choose the tools and languages that are right for them



Mix and match to create workflows with tools from Microsoft, open source or your favorite 3rd party tools



# Microsoft's DevOps Tooling – enhanced by GitHub





# Azure Boards

Track work with Kanban boards, backlogs, team dashboards, and custom reporting



## Connected from idea to release

Track all your ideas at every development stage and keep your team aligned with all code changes linked directly to work items.



## Scrum ready

Use built-in scrum boards and planning tools to help your teams run sprints, stand-ups, and planning meetings.

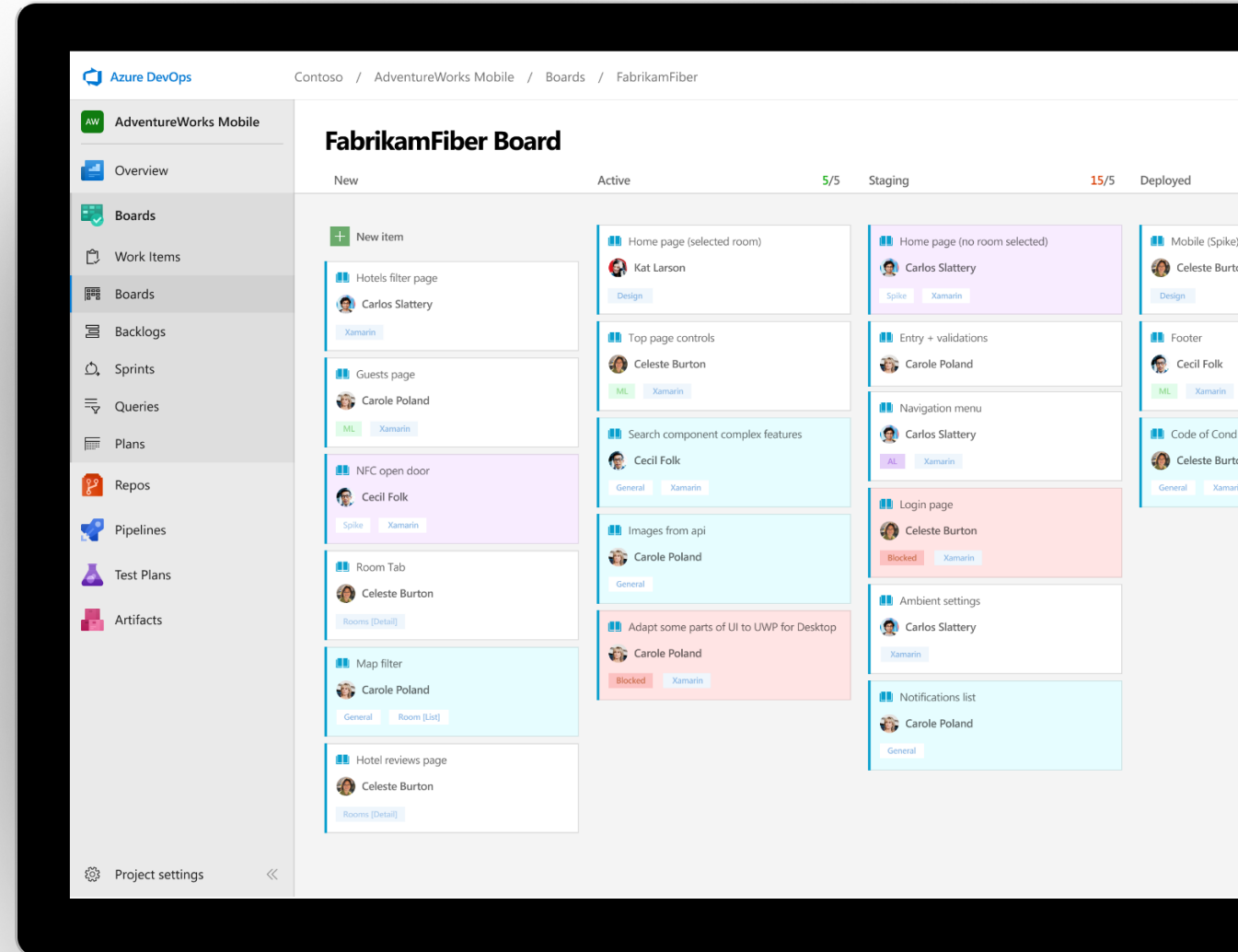


## Project insights

Gain new insights into the health and status of your project with powerful analytics tools and dashboard widgets.



<https://azure.com/devops>



# Planning & Tracking with Azure Boards



Azure Boards allow organizations to identify what is most important for their customers and objectively measure & track how they are delivering value to their customers.



Azure Boards is an interactive planning & tracking tool which provides visualization of the flow of work from concept to completion.



Business and technical teams can leverage Azure Boards to track all your ideas at every development stage and keep your teams aligned with all code changes linked directly to work items.

The screenshot displays the Azure Boards interface for a bug report titled "2100 Food Item should have a color field". The bug is in a "Committed" state, assigned to Dave Burnison, and is linked to the "MercuryHealth\Nutrition" area. The "Repro Steps" section shows a sequence of four steps: three "Passed" steps (opening the website, clicking "Nutrition", and clicking "Create New") and one "Failed" step (entering specific data). The "Failed" step includes a comment: "Comments: No color field". The "System Info" table at the bottom shows browser details: Google Chrome 71, en-US language, and a height of 960. On the right, the "Development" sidebar shows a workflow: "CI Build" (partially succeeded), "Pull Request" (completed), "Branch" (merged to master), and "Test Case" (ready). The "Related Work" section lists child items and related user stories.

Step no.	Result	Title
1.	Passed	Open the Mercury Health Web Site: <a href="http://mercuryhealthdemo.azurewebsites.net/">http://mercuryhealthdemo.azurewebsites.net/</a>
2.	Passed	Click on <b>Nutrition</b> .
3.	Passed	Click on <b>Create New</b> .
4.	Failed	Enter the following Data: @Quantity, @Description, @MealTime, @Tags, @Calories, @Protein/g, @Fat/g, @Carbohydrates/g, @Color, @Sodium/g

Browser - Name	Google Chrome 71
Browser - Language	en-US
Browser - Height	960

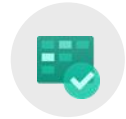
# Backlogs Hub

Use your product backlog to quickly plan and prioritize your work.



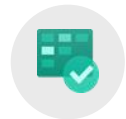
## Prioritize work items

Drag and drop items to adjust the order to help keep things in order or priority.



## Manage relationships with hierarchy

After you've added features or epics to your portfolio backlog, you can map backlog items to them.



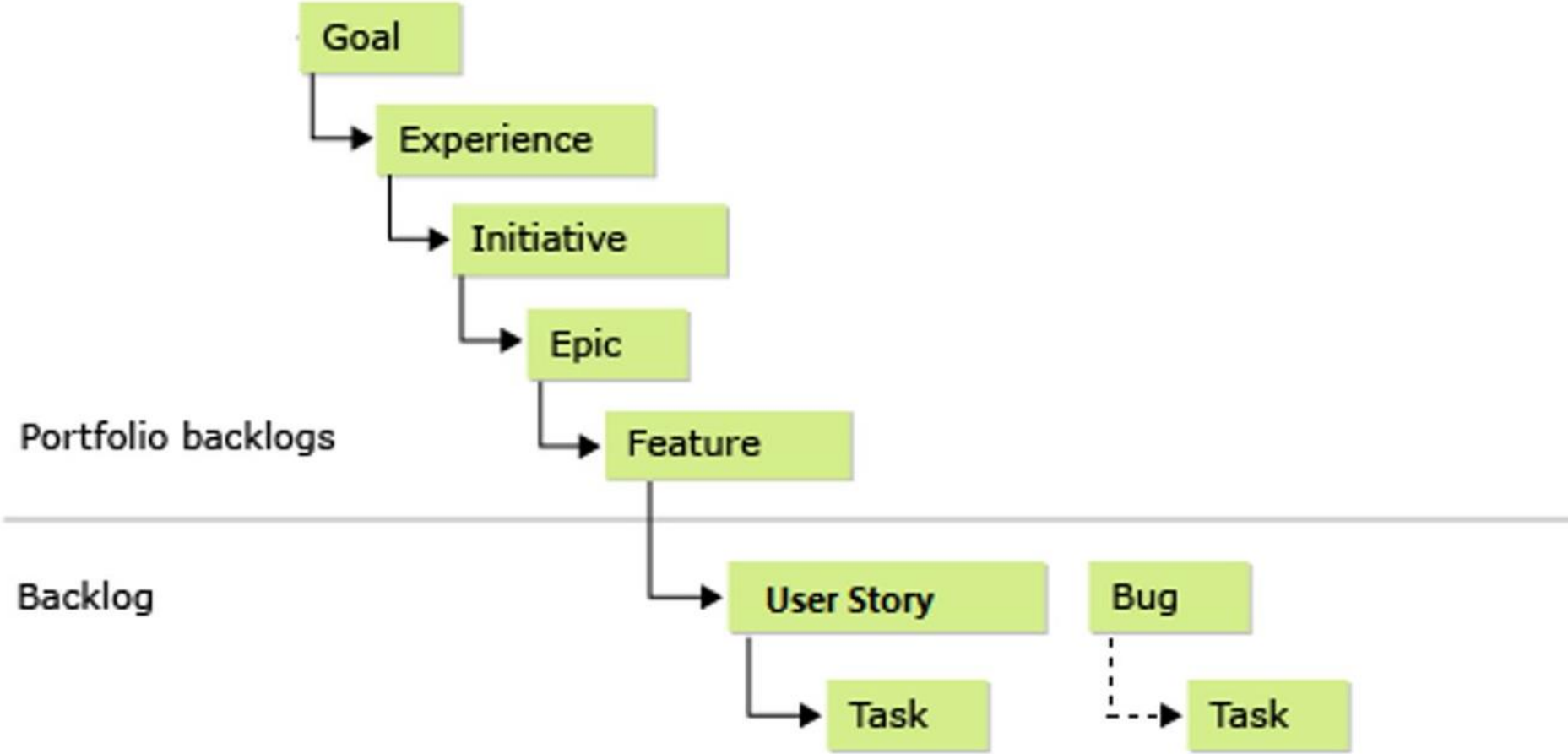
## Plan sprints

Use the Plan Sprints pane to quickly assign work to an upcoming sprint.

The screenshot displays the Azure DevOps Backlogs Hub interface. The left sidebar shows navigation options: Directory, Overview, Boards, Work Items, Boards, Backlogs (selected), Sprints, Queries, Repos, Pipelines, Test Plans, and Artifacts. The main area shows a list of work items for the 'Directory Team' project. The list includes various work item types such as Features, User Stories, Bugs, and Unparented Stories, each with a title, state, and assignee.

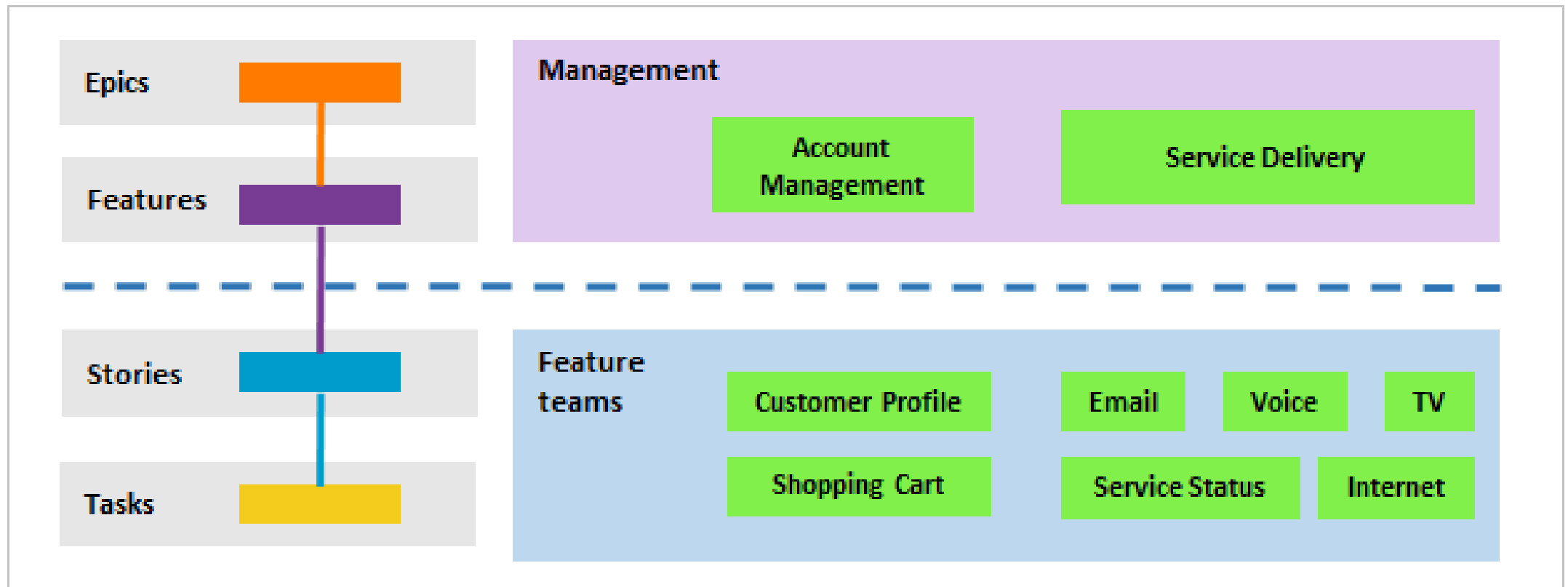
Order	Work Item Type	Title	State	Assignee
+	Feature	Directory samples	New	
	User Story	The FeatureSamples project should compile for UWP with rel...	New	
①	Feature	Notifications	Active	Aar...
	User Story	Add user friendly message in case CodePush service is down ...	New	Mar...
	User Story	Pending invites	New	Rick...
	User Story	Notify user of update availability	Active	Mar...
①	Feature	Directory customization	New	
	Bug	Status bar overlaps with header	Active	Chri...
①	Feature	User profile	Active	Aar...
	User Story	Support for social registration and account linking	Active	Aar...
	Unparented Stories			
	Bug	.form-control-file breaks out of column if input's width is big...	Active	Rick...
	User Story	One-click setup of new directory nodes	Active	Chri...
	User Story	Honor dragger option when drawer is open on the form	Active	Rick...
	User Story	Support Brownfield React Native apps	Active	Beth...
	User Story	Account telemetry	New	Beth...
	Bug	When zooming zoompart is not rendering correctly	New	Beth...
	User Story	Mobile center support	New	Rick...
	Bug	AndroidMultiThreading leaks progress dialog	New	Rick...
	Bug	Phoneword sample has out-of-date API targets	New	Chri...

# The hierarchy of requirements





# Portfolio management



Demo

# Backlogs Hub

# Sprints Hub

Sprints give you the ability to create increments of work for your team to accomplish together.



## Taskboard

Use the taskboard in daily Scrum meetings to view progress made to backlog items and tasks.



## Capacity Planning

Assign work hours to team members to help you and your team deliver your work on time.



## Burndown Chart

Throughout your sprint, you can monitor the sprint burndown chart to determine if your team is on track to complete its sprint plan.

The screenshot shows the Azure DevOps Sprints Hub interface for the 'Directory Team' during the 'Sept 10 - Sept 13' sprint (4 work days). The interface is divided into several sections:

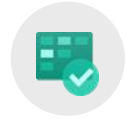
- Navigation:** A left sidebar contains icons for Directory, Overview, Boards, Work Items, Boards, Backlogs, Sprints (highlighted), Queries, Repos, Pipelines, Test Plans, and Artifacts. A 'Project settings' link is at the bottom.
- Team and Sprint Info:** At the top right, it shows 'Directory Team' with a star and a person icon, and the current sprint 'Sept 10 - Sept 13' (4 work days).
- Taskboard:** The main area is a Kanban-style taskboard with columns for 'New', 'Active 2 h', and 'Closed'.
  - New Column:** Contains two items:
    - 'Live directory updates for all L1 changes' by Rick Martinez, State: Closed.
    - 'APIs changed to support add/remove' by Beth Johanssen, State: API.
  - Active 2 h Column:** Contains two items:
    - 'Tag design improved to match directory pages' by Aaron Bjork, State: Design.
    - 'Include cached results when starting a browse session' by Aaron Bjork, State: Design, with a '2' in the bottom right corner.
  - Closed Column:** Contains two items:
    - 'Async changes hap all open pages in the d' by Chris Beck, State: Design.
    - 'APIs updated to su updates in real-time' by Aaron Bjork, State: API.
- Bottom Section:** A card titled 'Directory browsing resulting in incomplete results' by Aaron Bjork, State: Active, with a '2 h' in the bottom right corner.

Demo

# Sprints Hub

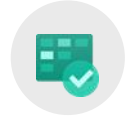
# Boards Hub

The pre-configured Kanban board is perfect for managing the flow of your work.



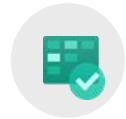
## Highly customizable

Customize columns, swim lanes, cards, conditional formatting, filtering, and even WIP limits.



## Extensibility through extensions

Add specific features and capabilities to your board with free or paid extensions.



## Live updates

See all board changes as they happen.

The screenshot displays the Azure DevOps Boards Hub interface. The top navigation bar shows 'Azure DevOps' and the current path: 'Contosolncorporated / Directory / Boards / Work Items'. The left sidebar contains a navigation menu with options: 'Directory', 'Overview', 'Boards', 'Work Items', 'Boards', 'Backlogs', 'Sprints', 'Queries', 'Repos', 'Pipelines', 'Test Plans', and 'Artifacts'. The main area shows a Kanban board for the 'Directory Team'. The board is organized into columns: 'Backlog', 'Dev Design' (4/5 items), and 'Implementing' (1 item). The 'Dev Design' column is further divided into 'Expedite' and 'Doing' lanes. The 'Expedite' lane contains three items: 'Account telemetry' (Beth Johanssen), 'Add user friendly message in case CodePush service is down due to errors/upgrades' (Mark Watney), and 'When zooming zoompart is not rendering correctly' (Beth Johanssen, Priority 2). The 'Doing' lane contains two items: '.form-control-file breaks out of column if input's width is bigger than column's width' (Rick Martinez, Priority 1, 2/3) and 'One-click setup of new directory nodes' (Chris Beck). The 'Implementing' lane contains one item: 'Support for social registration and account linking' (Aaron Bjork, Private Preview, Social, 2/3). The bottom of the interface shows 'Project settings'.

Demo

# Boards Hub

# Queries Hub

Tailor exactly what you're tracking with the query engine.



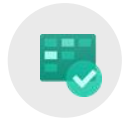
## Cross-project

Create and save queries to track work across different team projects.



## Pin to dashboard

Quickly pin queries to dashboards for quick monitoring and status.



## Bulk modify work items

Use bulk modify to quickly modify one or more fields for work items.

The screenshot displays the Azure DevOps interface for the 'Queries Hub'. The top navigation bar shows 'Azure DevOps' and the current path: 'ContosoIncorporated / Directory / Boards / Work Items'. The left sidebar contains a navigation menu with options: Directory, Overview, Boards, Work Items, Boards, Backlogs, Sprints, Queries, Repos, Pipelines, Test Plans, and Artifacts. The main content area is titled 'All Queries > My Queries > Incomplete Tasks' and shows a table of work items. The table has columns for ID, Work Item..., Title, Assigned To, and State. The selected work item is ID 1606, titled 'Build the cache tables needed to support carts w/o any items', assigned to Christina Kelly, with a state of 'New'. Below the table, a detailed view of this task is shown, including the assignee's name, a comment count, and fields for State (New), Reason (New), Area (FabrikamFiber), and Iteration (FabrikamFiber\Sprint 3). The description field contains the text: 'The cart needs a new cache mechanism in order to support pre-loading. The empty cart scenario makes this all the more important.' The planning section shows a priority of 2 and a development status.

ID	Work Item...	Title	Assigned To	State
1605	Task	Design the empty cart experience	Lowell Steel	New
1606	Task	Build the cache tables needed to support carts w/o any items	Christina Kelly	New
1607	Task	Update all error messages	Lowell Steel	New
1608	Task	Build the popup experience prompting to need to empty your cart	Aaron Bjork	Active
1609	Task	Update any controllers that need attention after supporting the empty ...	Noah Munger	New
1610	Task	Find all search experiences that should be updated	Lowell Steel	New
1611	Task	Empty cart prompts	Christina Kelly	Active

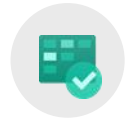
Demo

# Queries Hub



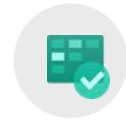
# Work Items Hub

Use work items to find and focus on work you care about.



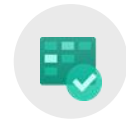
## Find work items assigned to you

Track work items that you're following or have viewed or modified recently.



## Rich filtering

Filter work items on types, assignment, states, area, and tags.



## Query and Search work items

Query work items within your project or across projects.

The screenshot displays the Azure DevOps Work Items Hub interface. The top navigation bar shows the Azure DevOps logo, the organization name 'ContosoIncorporated', and the breadcrumb path 'Directory / Boards / Work Items'. The left sidebar contains a navigation menu with the following items: Directory, Overview, Boards, Work Items (highlighted), Boards, Backlogs, Sprints, Queries, Repos, Pipelines, Test Plans, and Artifacts. The main content area is titled 'Work Items' and includes a filter bar with 'Assigned to me', '+ New Work Item', 'Open filtered view in Queries', and 'Column Options'. Below the filter bar is a table of work items with columns for ID, Title, Assigned To, State, and Tags. The table contains the following data:

ID	Title	Assigned To	State	Tags
1598	An error is thrown in the shopping c...	Aaron Bjork	Resolved	Custom...
1601	As user, I want to empty my shopping cart...	Lowell Steel	Active	Administ...
1597	Add the identity log tables into the DB	Aaron Bjork	Closed	Framewo...
1602	Shopping Cart	Aaron Bjork	Active	
1599	Shopping cart comparison	Noah Munger	New	Release...
1596	Not able to complete sign up flows	Aaron Bjork	Active	Core

Demo

# Work Items Hub

# Dashboards

Dashboards give a clear view of what's happening to track progress and direction.



## Real-time information

Dashboards provide easy-to-read, easy access, real-time information



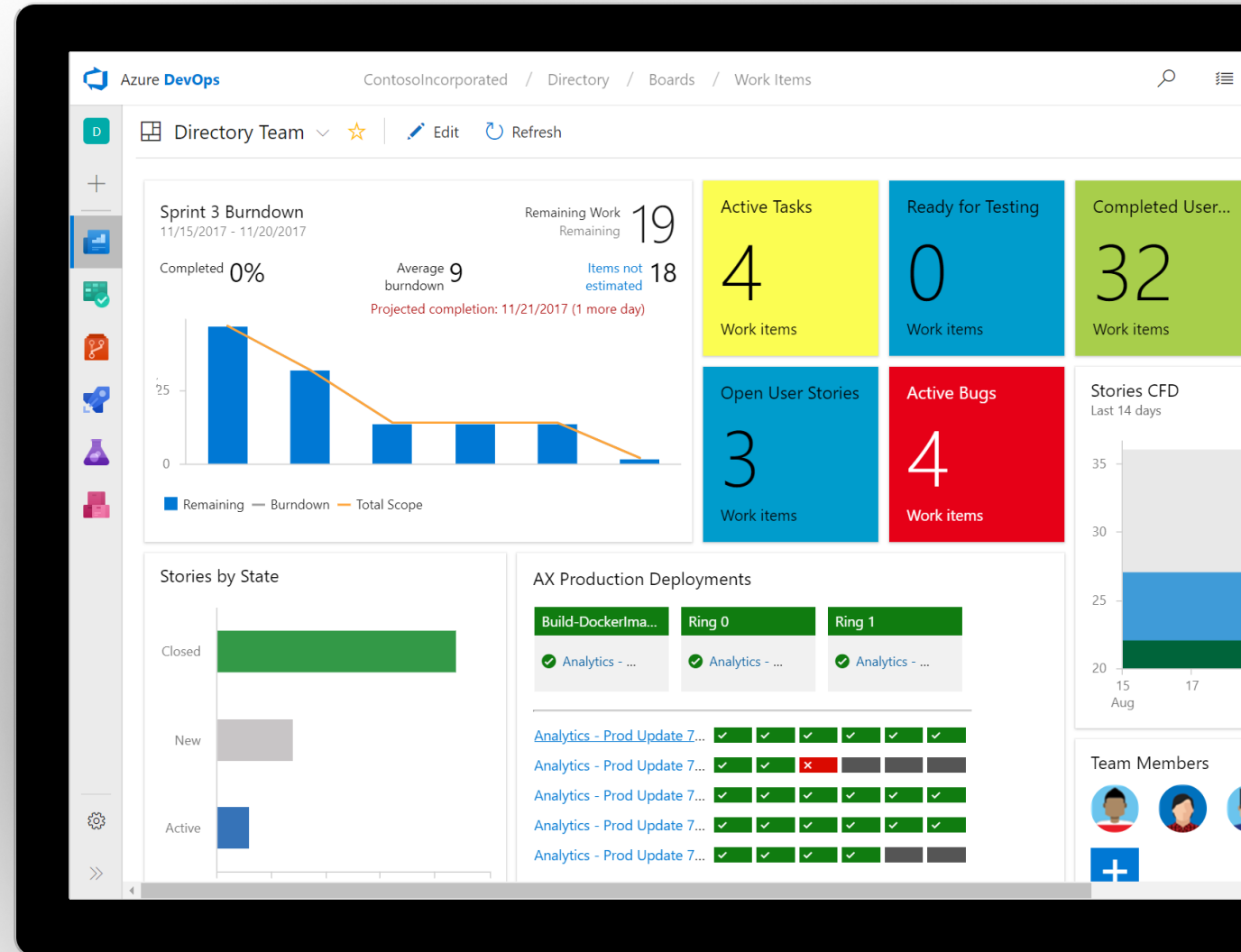
## Thriving community of widgets

Widgets smartly format data to provide access to easily consumable data. Add widgets to your team dashboards to gain visibility into the status and trends occurring as you develop your software project.



## Add dashboards as needed

Tailor configure the layout that makes sense for your team, and easily monitor progress throughout the lifecycle of your project.



Demo

# Dashboards

# Better Together!! – Azure DevOps & Microsoft Teams

Microsoft Teams makes collaborating on projects a breeze - from idea to completion.



## Collaborate, communicate and celebrate

Teams is your chat-centered workspace. Azure DevOps teams get instant access to everything they need in a dedicated hub for teamwork, that brings your teams, conversations, content and tools together into one place.



## Messaging Extension

You can search, find, and discuss specific work items with your colleagues from within Microsoft Teams. The messaging extension will work for both team and individual chat discussions.



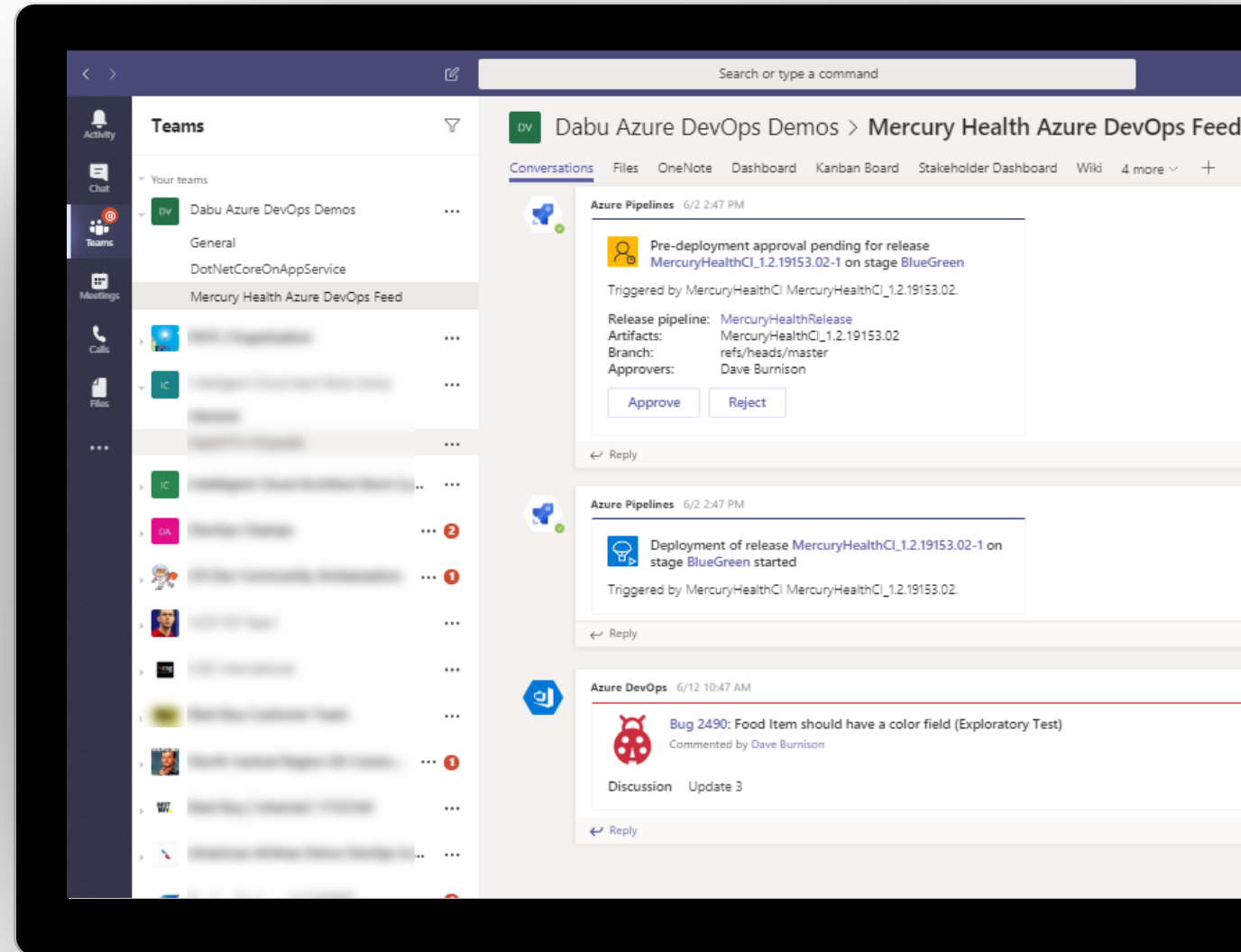
## Dashboards

Keep track of your project by adding your favorite VSTS dashboard directly into Microsoft Teams.



## Kanban boards

Track and create new work items with Kanban boards right into Microsoft Teams. All your favorite Kanban board features - live refresh, card styling, tag coloring, extensions, and more - are available without leaving your team's channel.



<https://marketplace.visualstudio.com/items?itemName=ms-vsts.vss-services-teams>



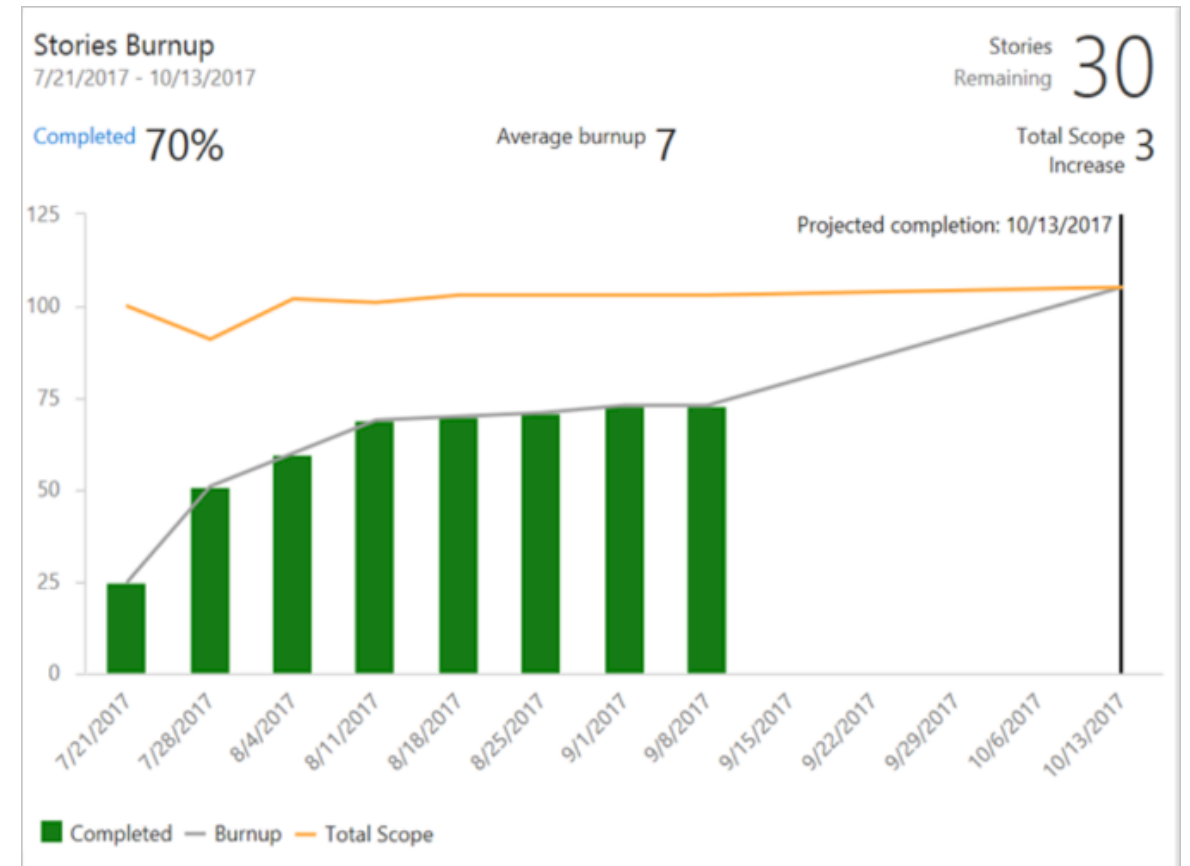
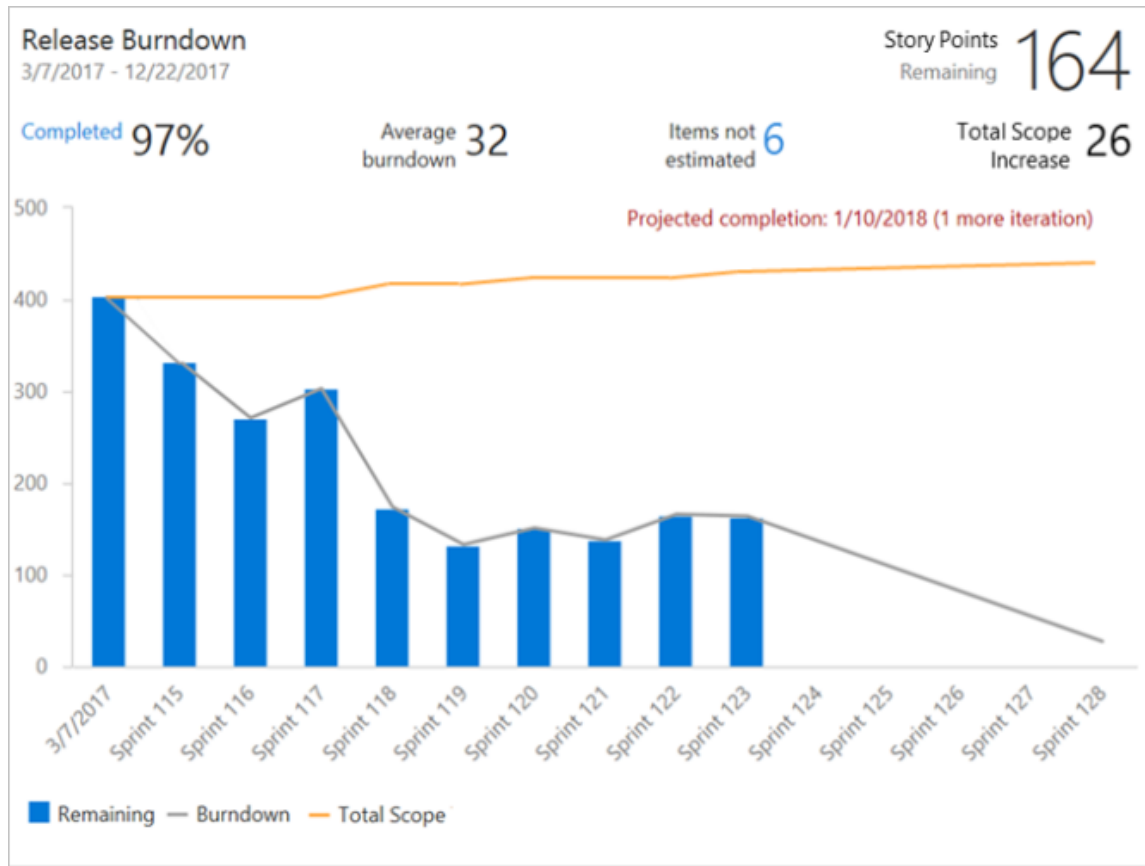
Azure Boards

Demo

# Azure DevOps & Microsoft Teams

# Reports & Widgets based on Analytics

# Burn Down & Burn Up





# Sprint Burndown

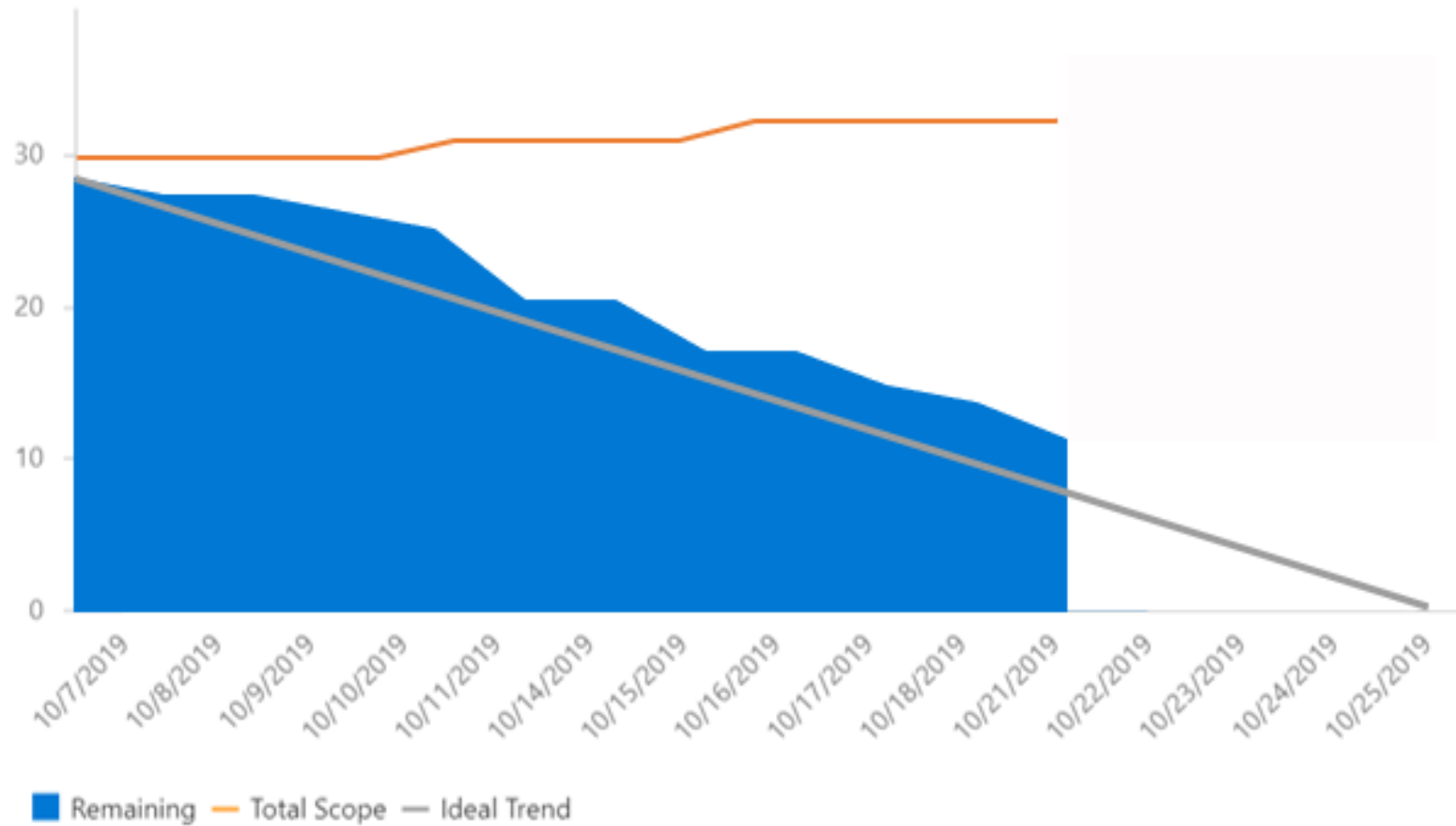
TeamX Sprint Burndown  
10/7/2019 - 10/25/2019

Completed 40%

Average burndown 1.3

Tasks Remaining 15

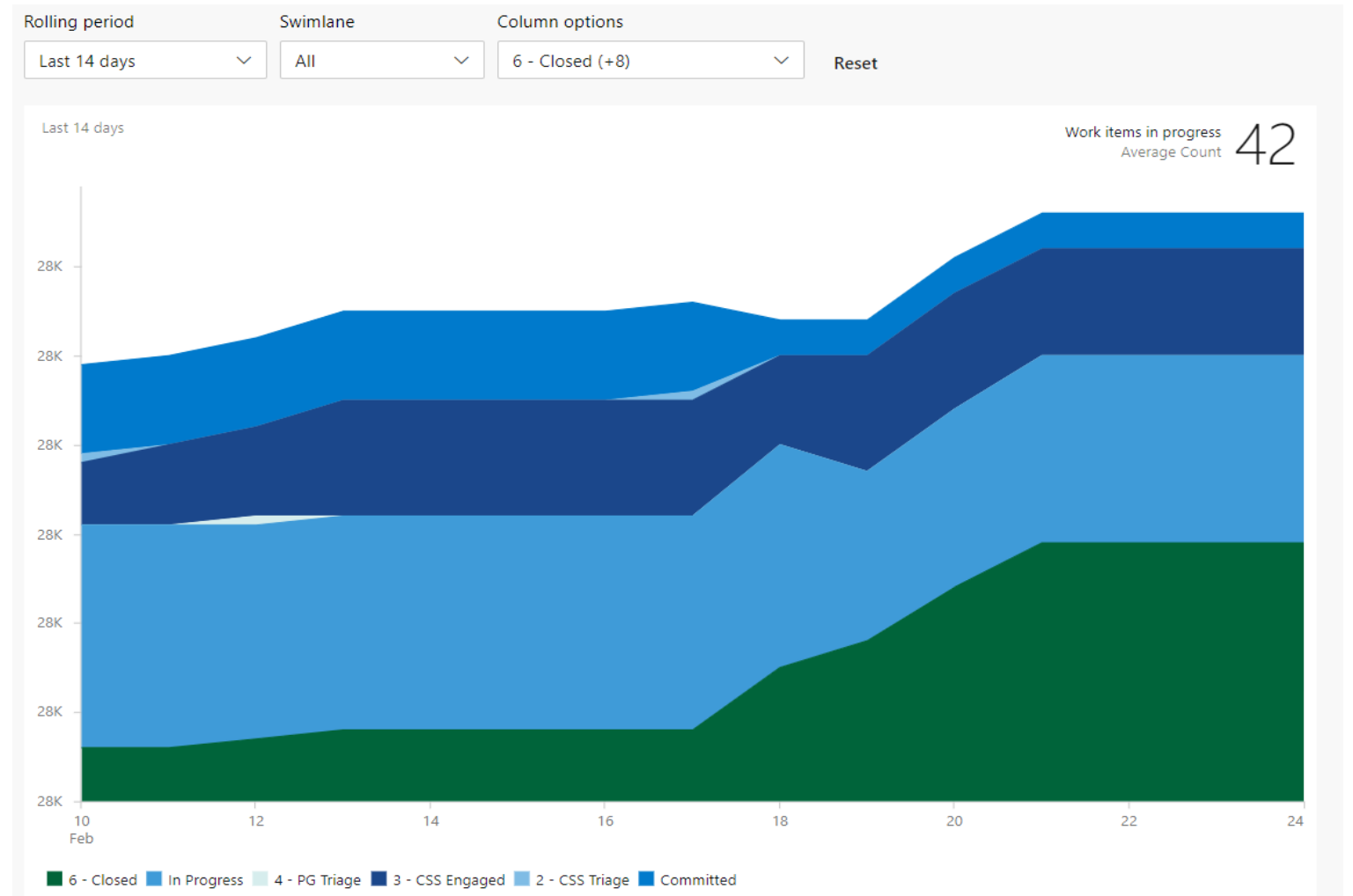
Total Scope Increase 4



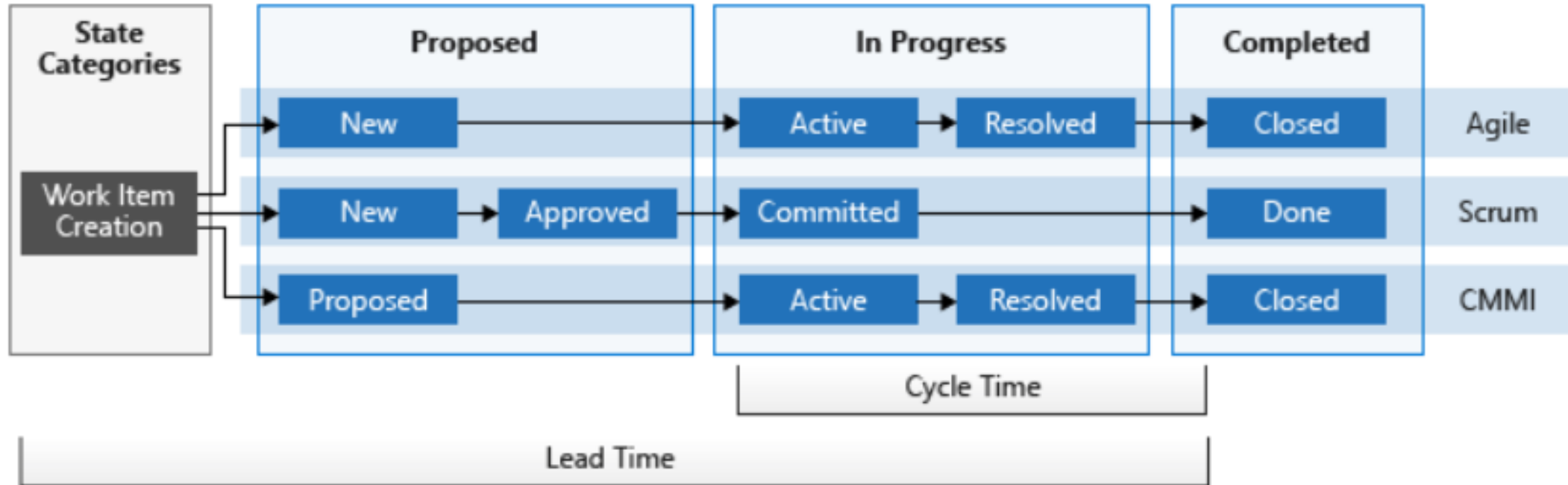
# Cumulative Flow Diagram

The CFD widget shows the count of work items (over time) for each column of a Kanban board.

This allows you to see patterns in your team's development cycle over time.



# Lead time and cycle time widgets



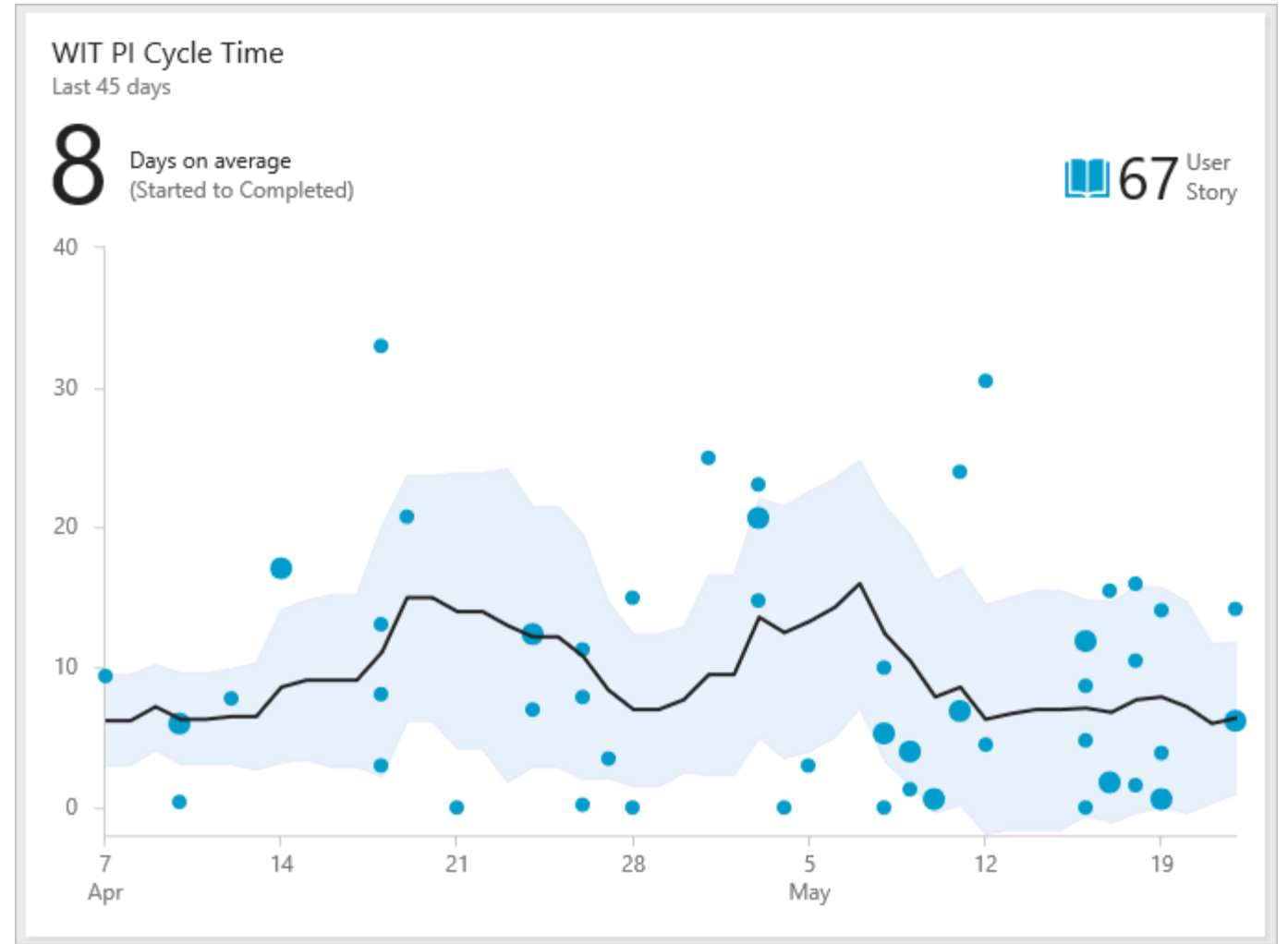
**Lead time** measures the total time elapsed from the creation of work items to their completion.

**Cycle time** measures the time it takes for your team to complete work items once they begin actively working on them.

# Lead time widget

The Cycle time widget will help you analyze the time it takes for your team to complete work items once they begin actively working on them.

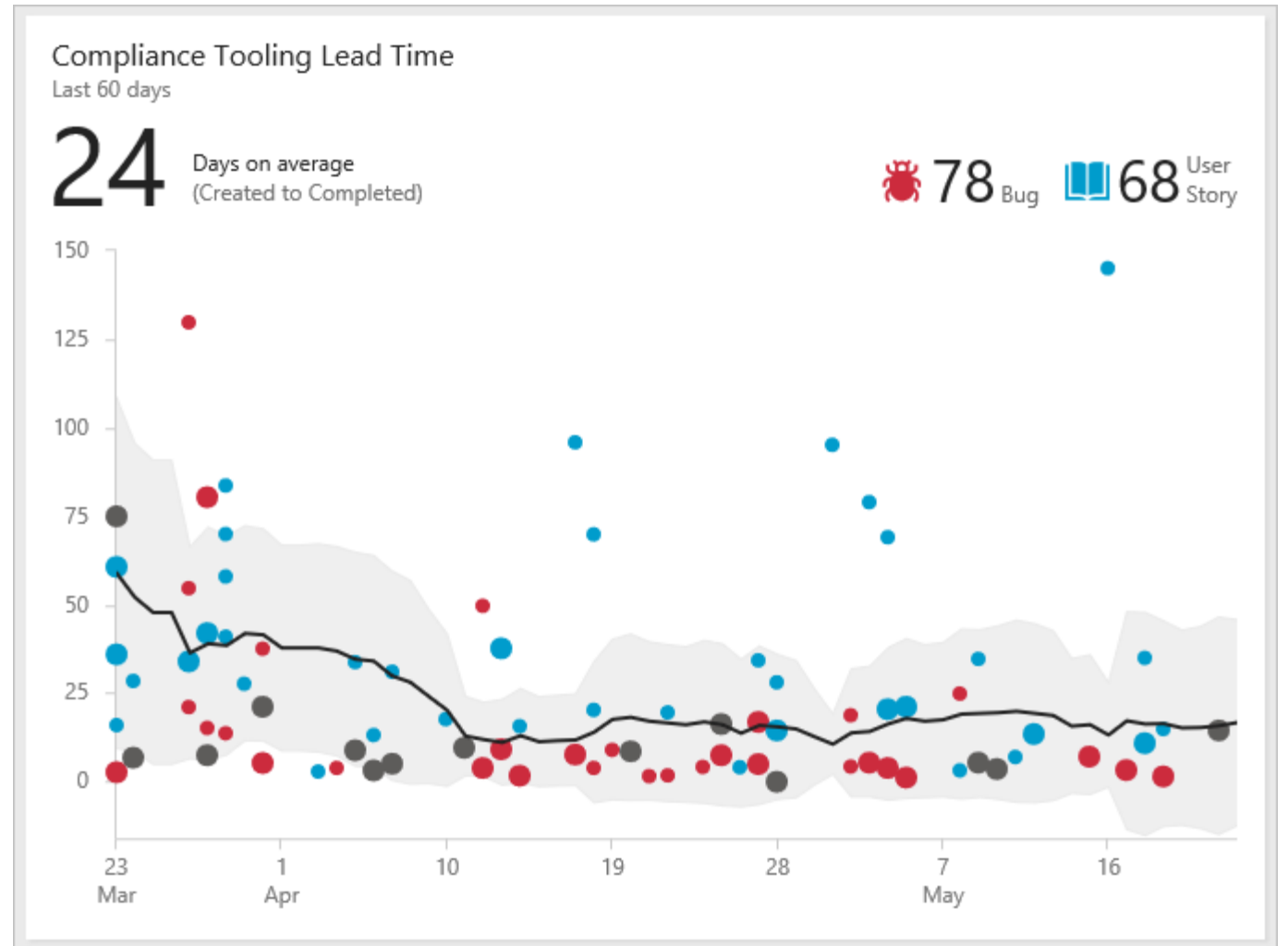
A lower cycle time is typically indicative of a healthier team process.



# Cycle time widget

The Lead time widget will help you analyze the time it takes to deliver work from your backlog.

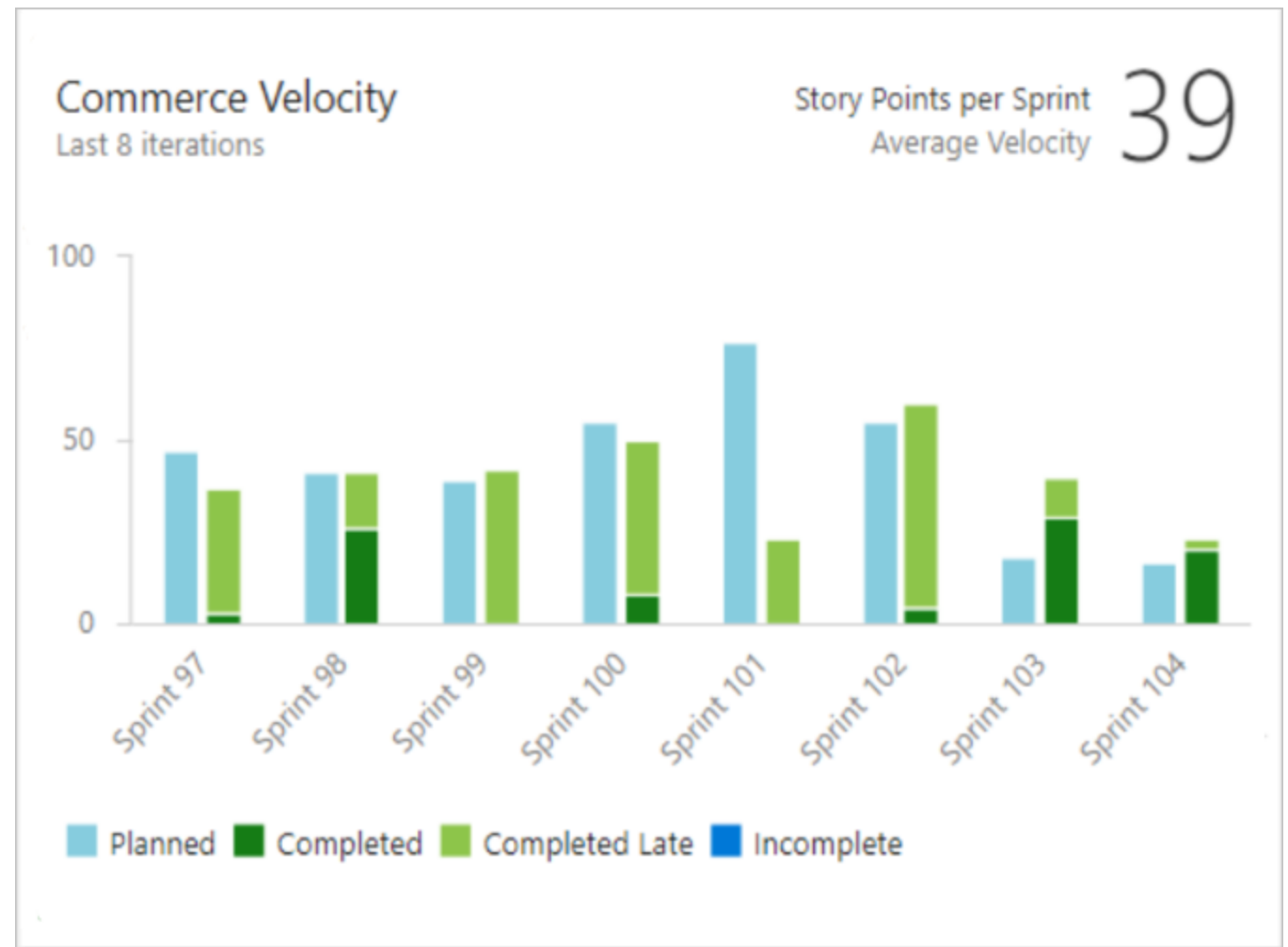
Lead time measures the total time elapsed from the creation of work items to their completion.



# Velocity

The Velocity widget will help you learn how much work your team can complete during a sprint.

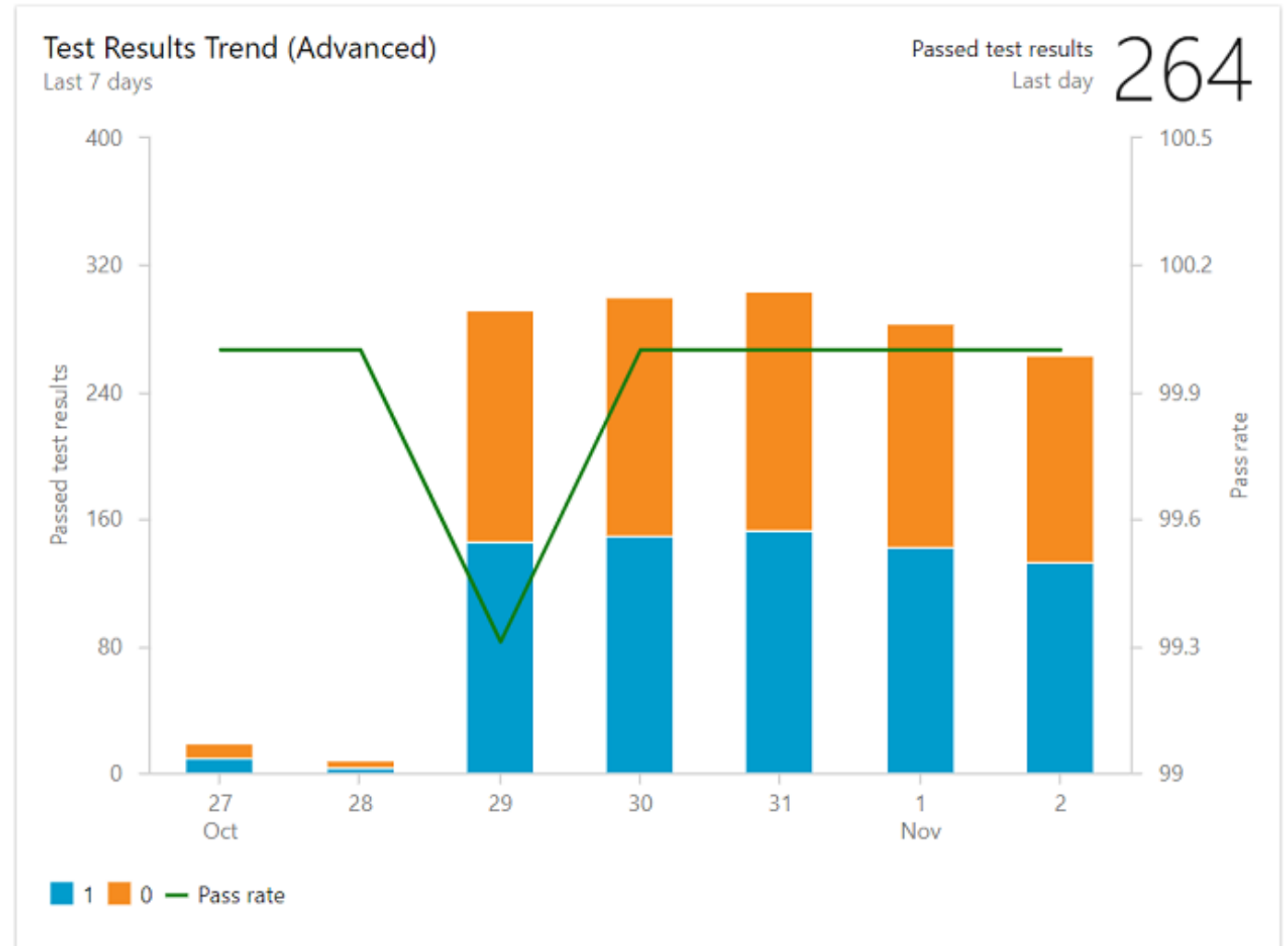
The widget shows the team's velocity by Story Points, work item count, or any custom field.



# Test Results Trend – Build/Release

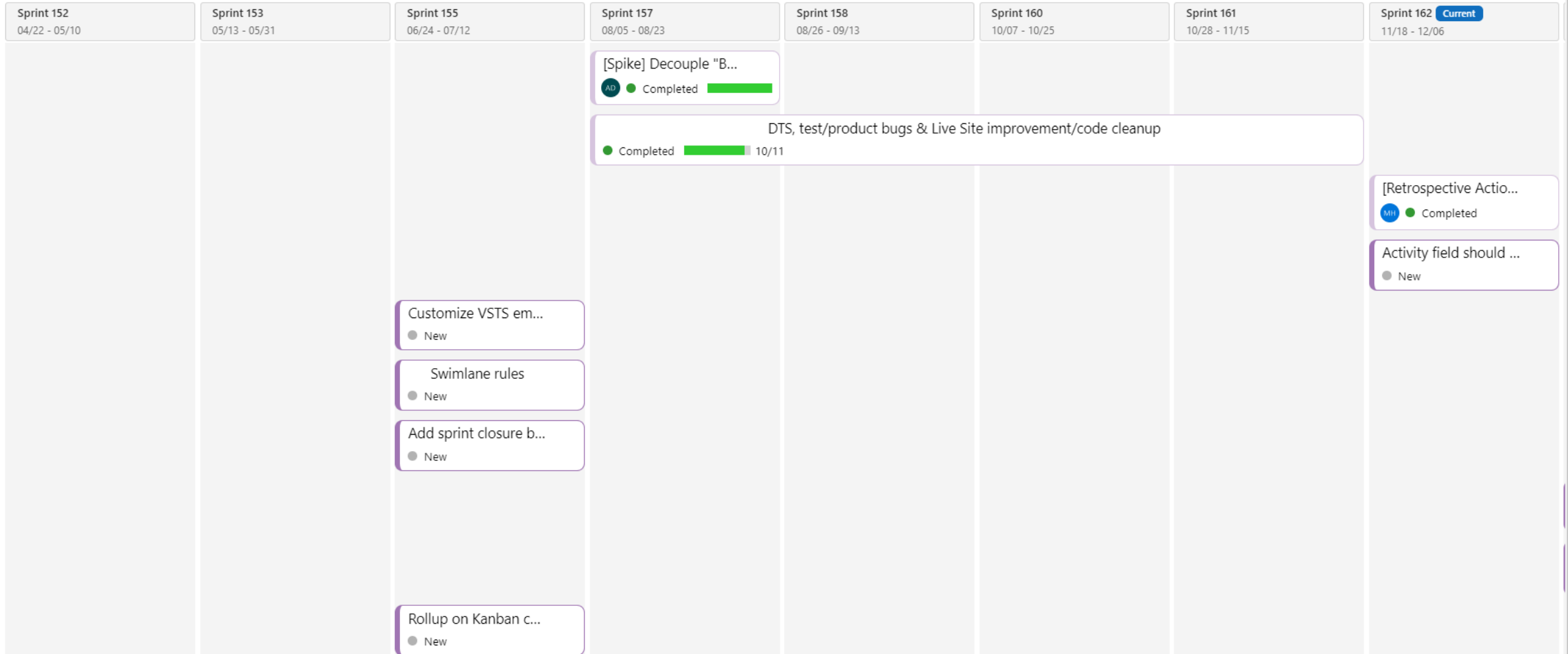
With the Test Results Trend (Advanced) widget, you can track the test quality of your pipelines over time.

Tracking test quality and improving test collateral are essential tasks to maintaining a healthy DevOps pipeline.



# Features Timeline

View Sprints:   Plan Features  Show Details Track Progress Using:  Closed Features:





# Epic Roadmap / Portfolio Plans (Beta)

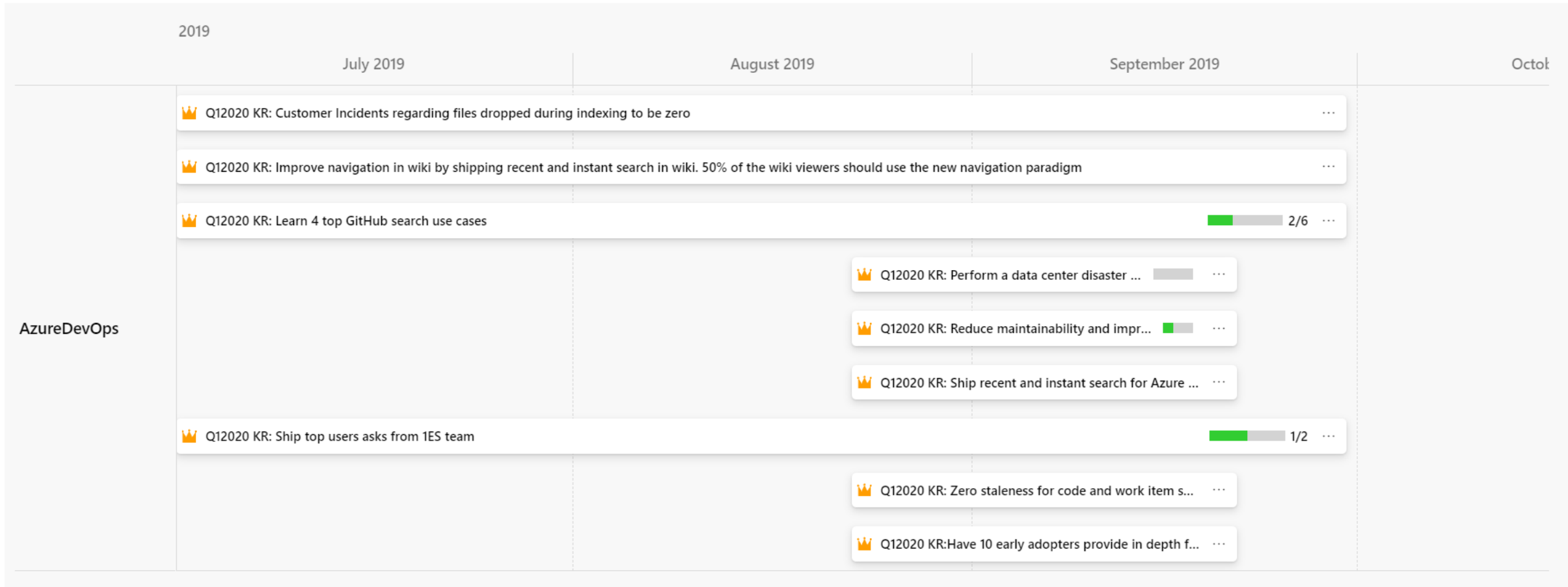
← MI&S Portfolio Plan



Sudha Narayanan

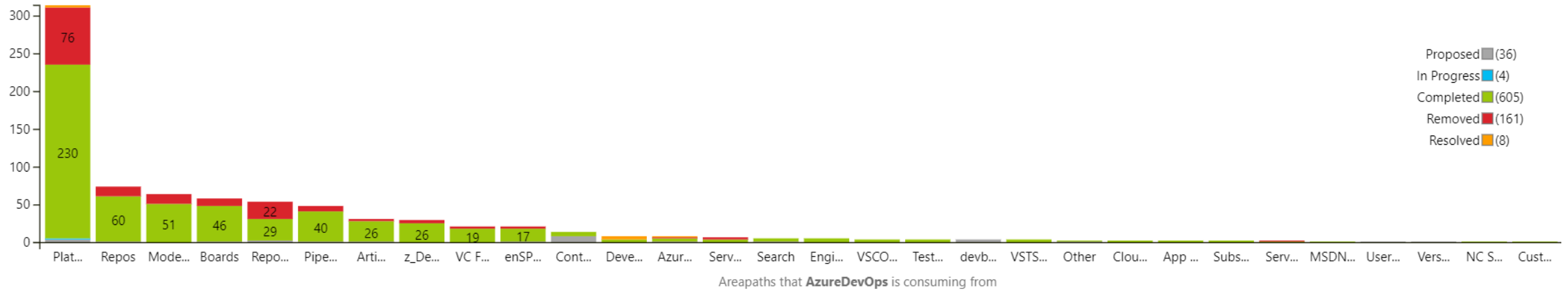
Projects  
AzureDevOps

Teams  
Modern Interactions and Search, Azure DevOps Search Old



# Dependency Tracker - Consuming

Consuming Dependencies | Producing Dependencies | Timeline | Risk Graph | Refresh | + New Dependency



Area paths that **AzureDevOps** is consuming from

Showing : 814 unique dependencies | Column Options | Display : Producer on top

Id	Area Path	Title (Producer on top)	State	Consumers	Producers
7948	AzureDevOps\VSTS\Platform\Enterprise Authoriz...	> SPS: Implement HTML mail template for TFS/SPS	● Complet...	Platform	Platform
8217	AzureDevOps\VSTS\Platform\Enterprise Authoriz...	> SPS: Implement a common schedule SPS email function (if not exist tod.	● Complet...	Platform	Platform
8405	AzureDevOps\VSTS\Platform\Identity	> Populate download links for RTM experience	● Complet...	Platform	Platform
9059	AzureDevOps\VSTS\Platform\Identity	> Download API to serve RIO and Atlas tags for Preview, RC and RTM rele.	● Complet...	Platform	Platform
9160	AzureDevOps\VSTS\Platform\Identity	> Profile Links Created By the MtpsComments Control as Displayed on PT!	● Complet...	Platform	Platform
9567	AzureDevOps\VSTS\Platform\Service Insights	> EE: Identify candidates for improving build automation	● Complet...	Platform	Platform
10848	AzureDevOps\VSTS\Platform\Identity	> Add IsMsdnSubscriber to TfsRequestContext	● Cut	Platform	Platform
14558	AzureDevOps\VSTS\Boards\WIT Z	> CWI:LSC - Revise Rollup Implementation	● Cut	Boards	Boards
16228	AzureDevOps\VSTS\Pipelines\Application	> DTS: Bug - parameters (LogProjectNodes LogWarnings) missing in msbu	● 6 - Closed	Pipelines	Pipelines

# Dependency Tracker – Risk Graph

Consuming Dependencies | Producing Dependencies | Timeline | **Risk Graph** | Refresh | + New Dependency



**AzureDevOps**  
Consuming from All

**814 Consumer Dependencies**

<p><b>0%</b> Red <span style="color: red;">█</span></p>	<p><b>0.1%</b> Gray <span style="color: gray;">█</span></p>	<p><b>99.9%</b> Green <span style="color: green;">█</span></p>
---	---	--

State	Title
Closed	Disbale WIT flaky L1TestSettingChangedl
Closed	MSDN Downloads report is showing "Un
Cut	Azure Business-to-Business content
Completed	Communicate with WDG: Enable Tag, Arc
Cut	Ensure loopback requests get the appro
Completed	[Hack-a-doc] Create rename repo docum
Proposed	REST: batch endpoint for mapping push
Proposed	Fix the POST refs API
Proposed	Toolbar UI design
Completed	PR - redline comment attachment contr
Completed	EE: Exception Reduction: Instrument Resp
Completed	[Perf] VSCOM new header performance i



○ Producing For  
● Consuming From

**Legend**

**Link Width**

- < 10
- 10-30
- 30-50
- 50-70
- 70-90
- > 90

**Link Color**  On Track

At Risk or Not On Track

# Tools for Change

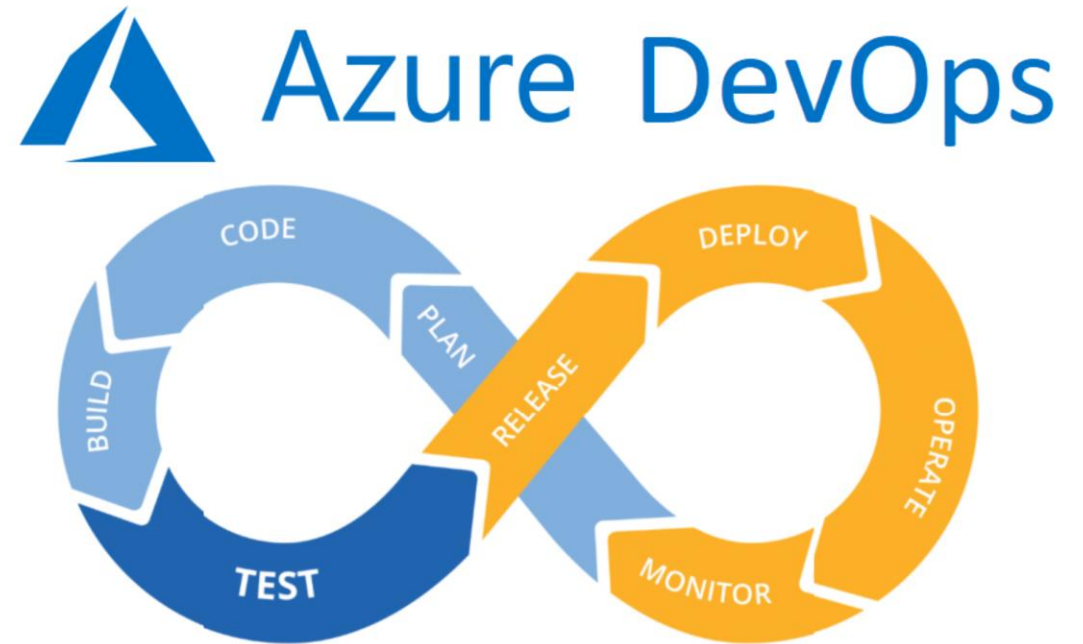
# Tools to Blend Waterfall Collaboration and Agile DevOps

## Old Way to Collaborate:

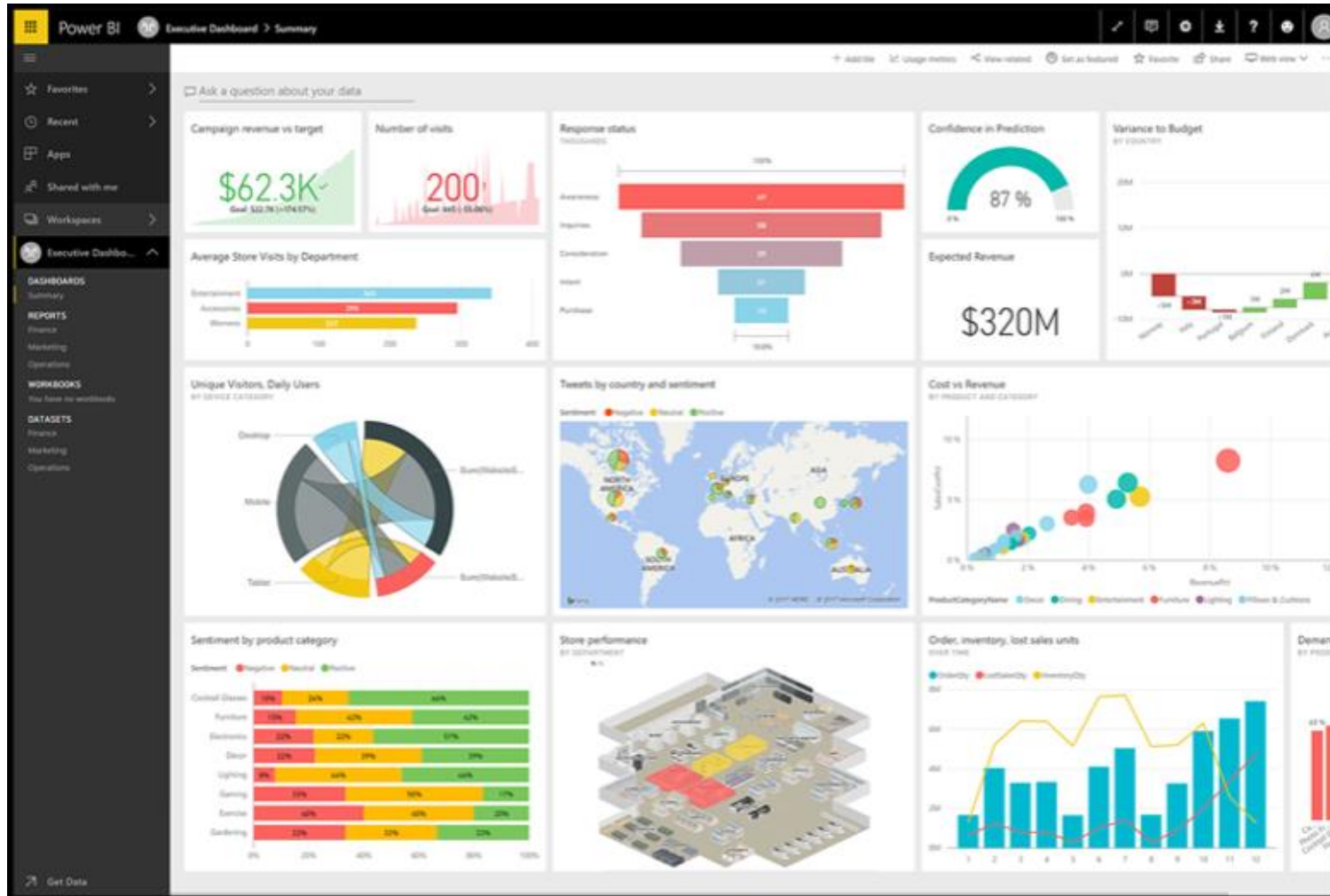
- Excel files filled with antiquated data
- Lost files in emails
- Stale information in desktop files

## New Way to Collaborate:

- Live reports with up to date project data
- Online collaboration in centralized locations
- Customer-prioritized planning through backlog grooming and collaboration.



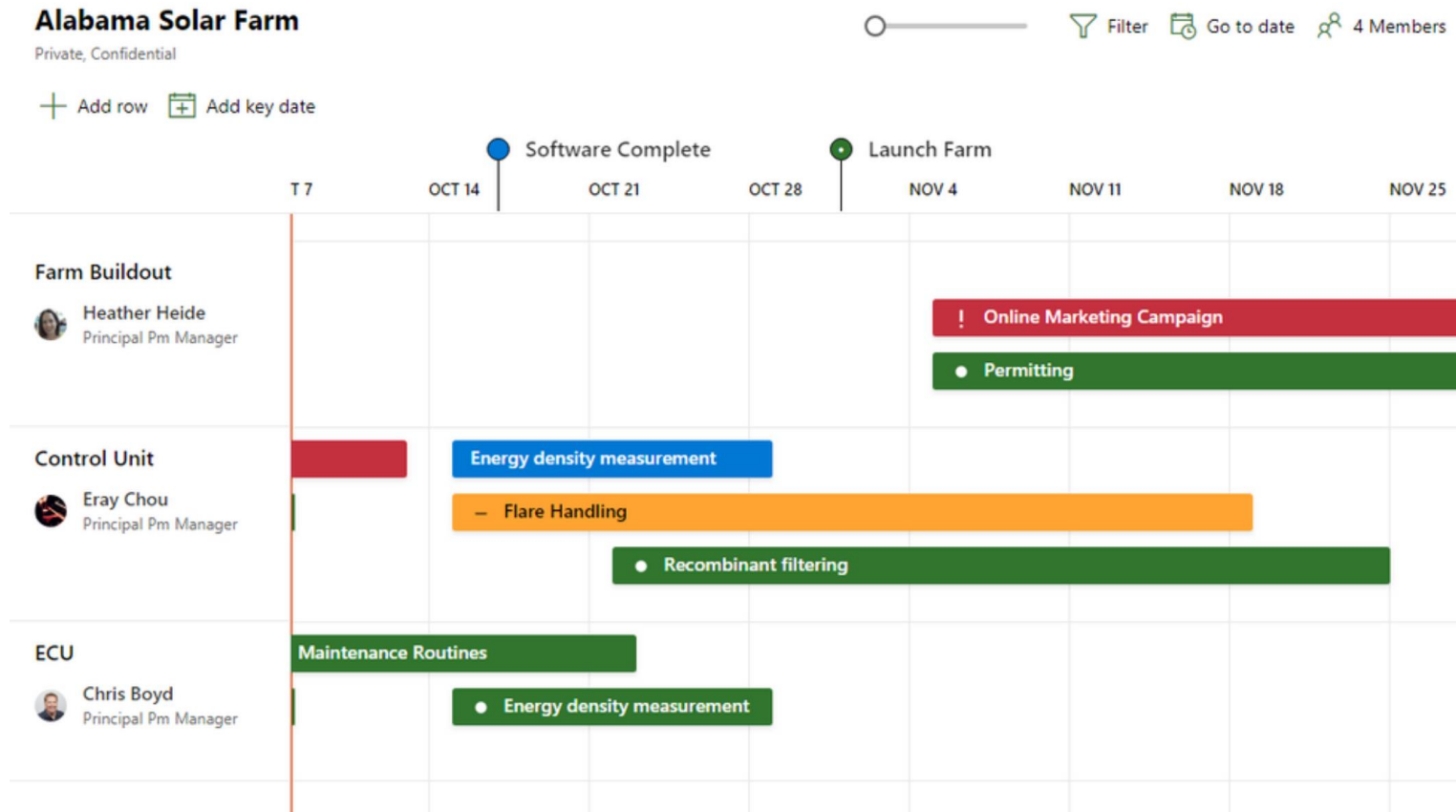
# Report Your ADO Project Data with Power BI



Microsoft's Default Tool for Visualizations

- Can connect to hundreds of different data sources
- Available on Mobile
- Connects to Azure Dev Ops

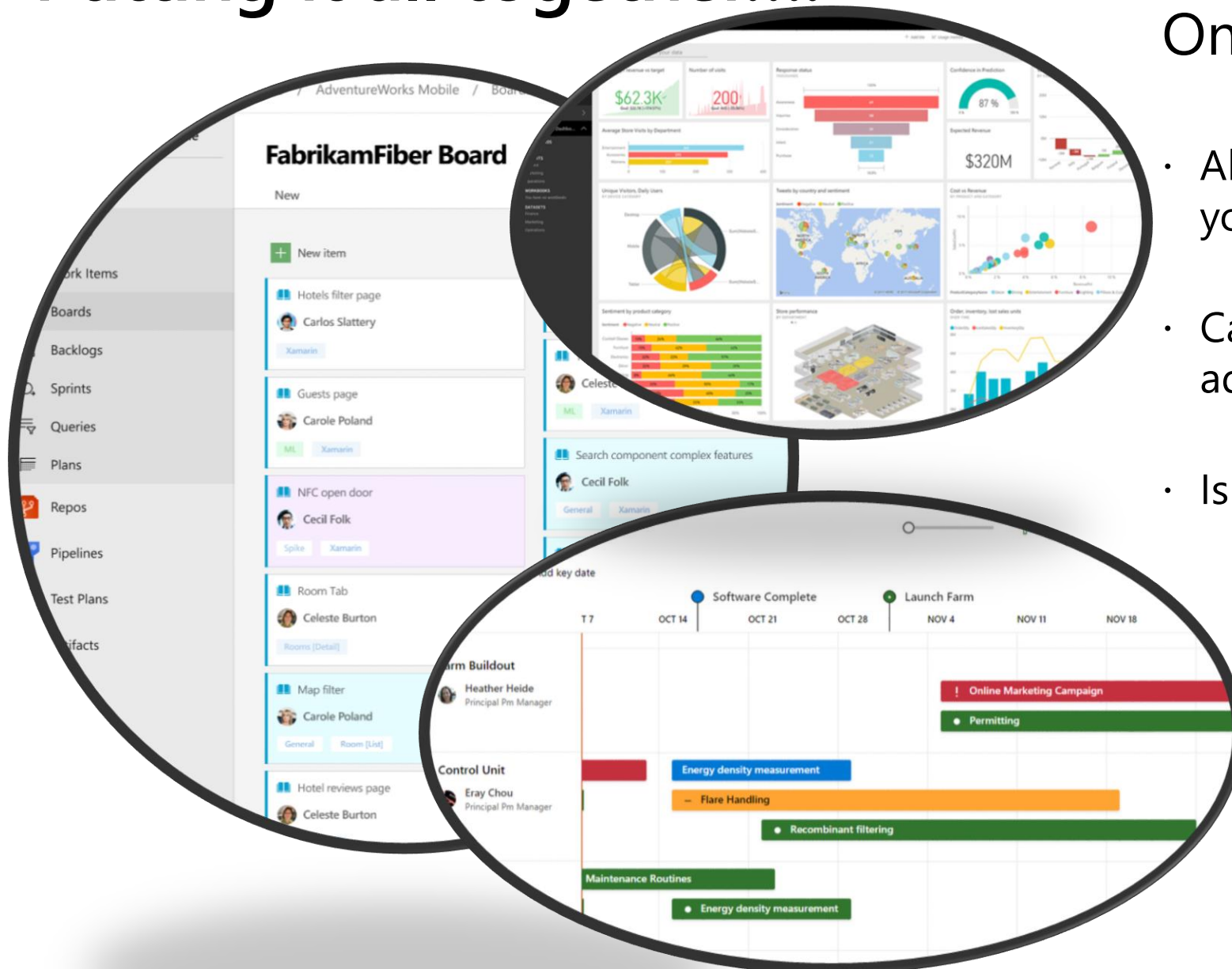
# The Project Roadmap Tool



- Great for combining information from multiple projects
- Can combine Agile and Waterfall based projects in one roadmap
- Can create a “portfolio view” of all ongoing projects



# Putting it all together...



- Connecting ADO and Project Online to the Roadmap Tool
- Allows for a wholistic program view of your projects
- Can be integrated into PowerBI for advanced visualizations
- Is live updated, keeping your data fresh!

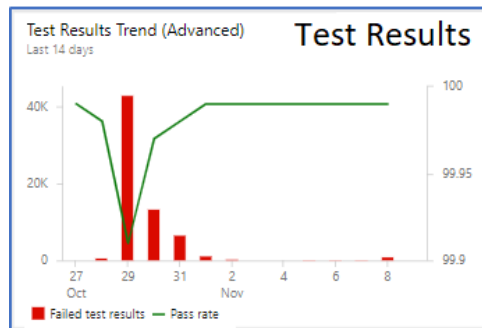
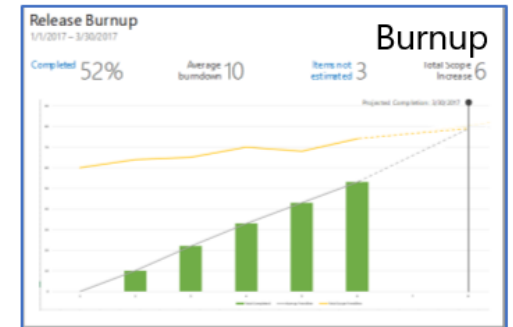
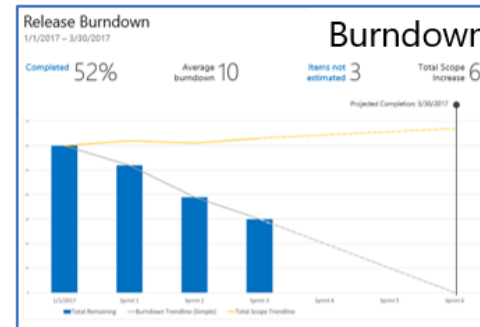
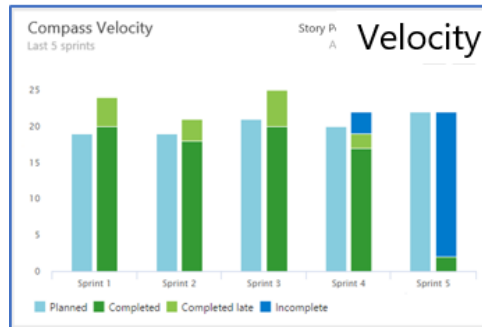
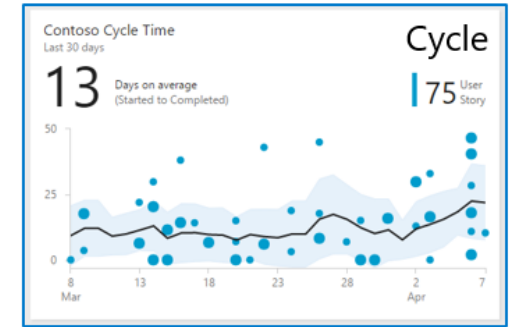
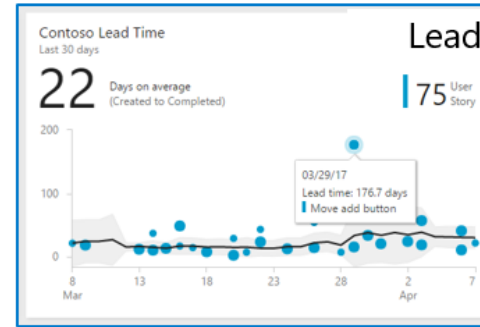
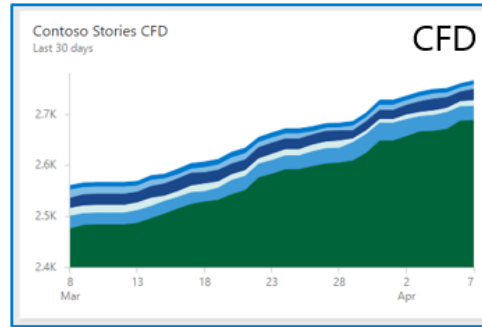


# Marketplace Resources

# Marketplace - Analytics

Analytics brings you and your team new insights into the health and status of your DevOps life cycle.

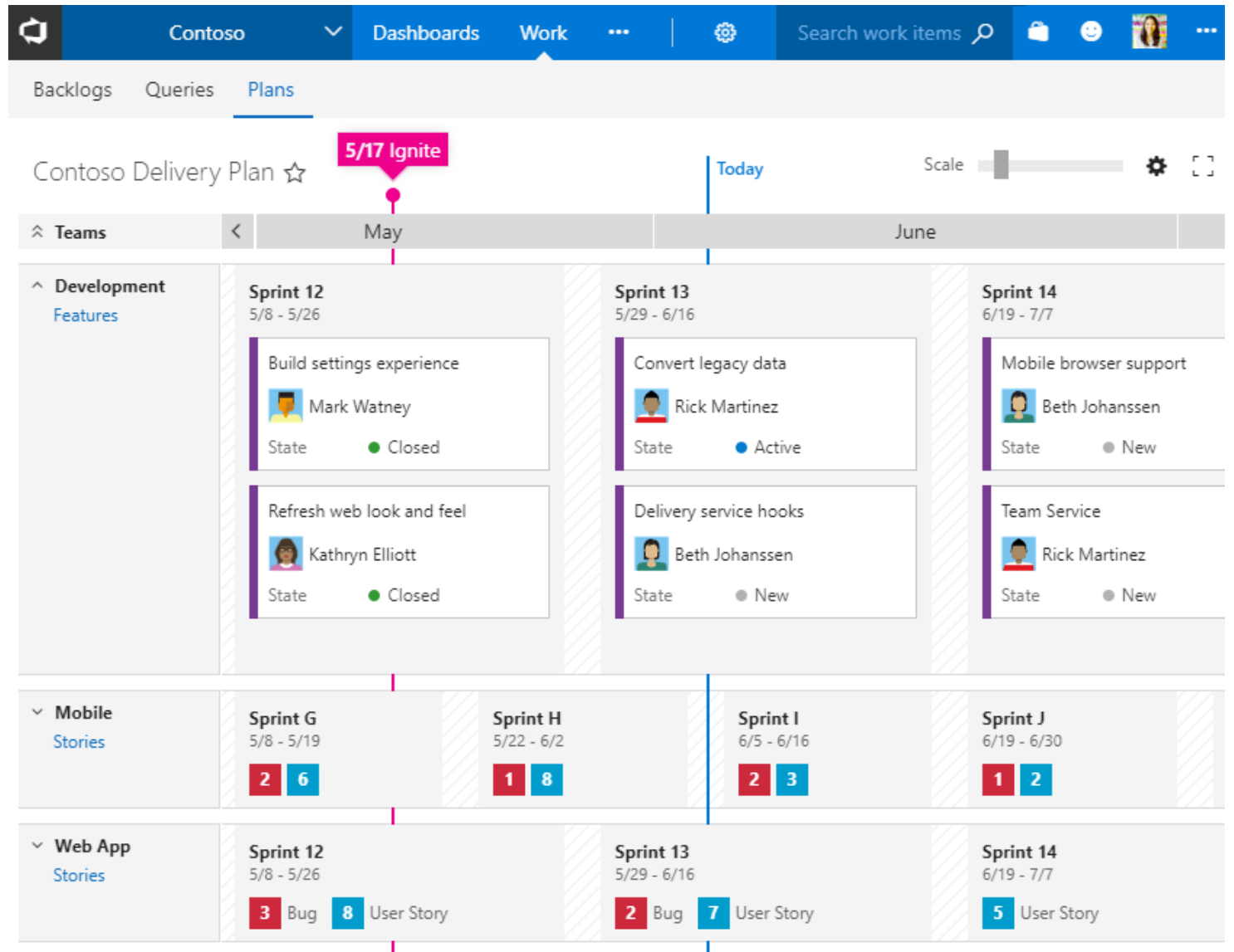
It helps you make data driven decisions and deliver value to your customers faster.



# Marketplace – Delivery Plans

Delivery Plans is an organizational tool that helps users drive cross-team visibility and alignment by tracking work status on an iteration-based calendar.

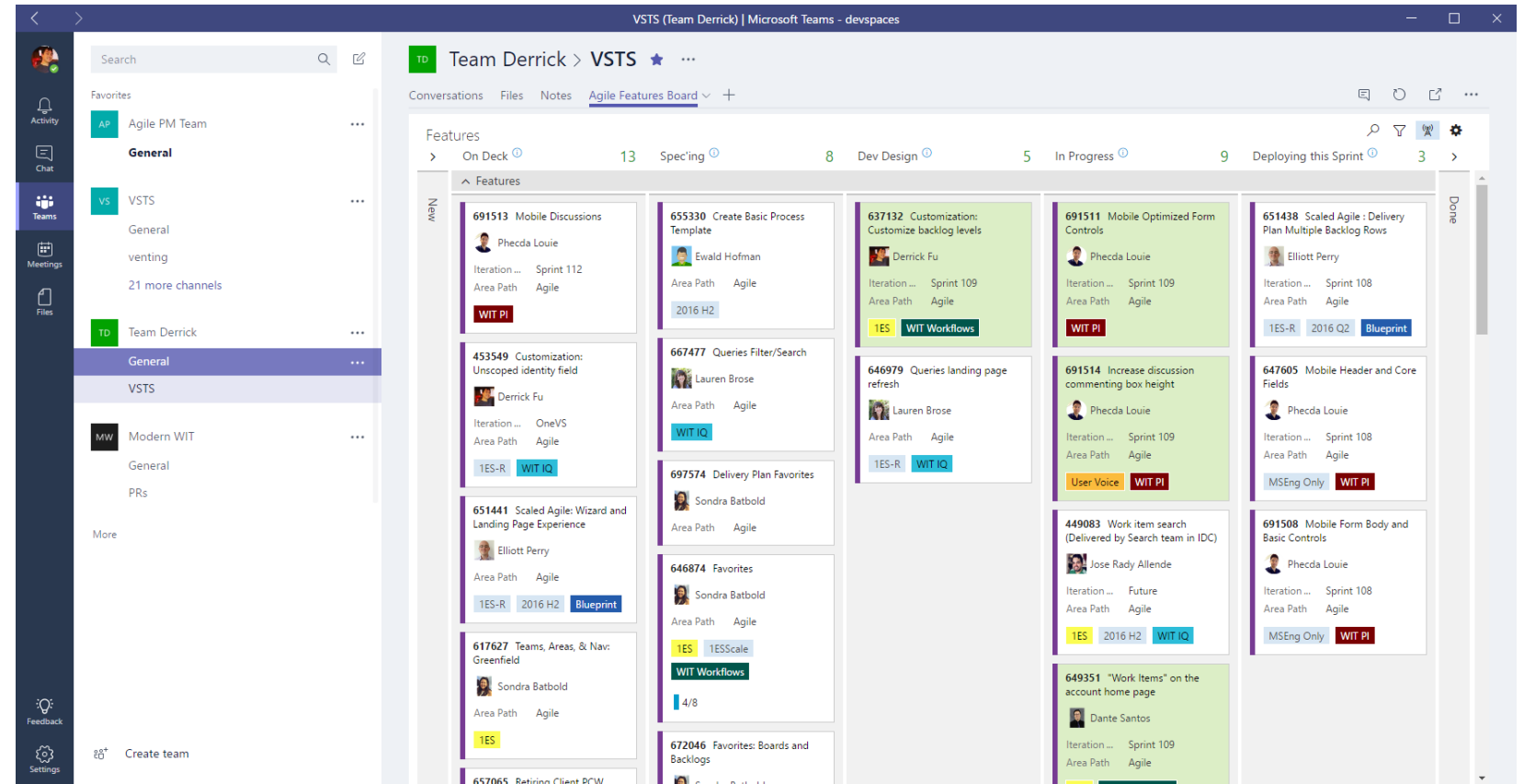
Users can tailor their plan to include any team or backlog level from across projects in the account.



<https://marketplace.visualstudio.com/>

# Marketplace – Microsoft Teams

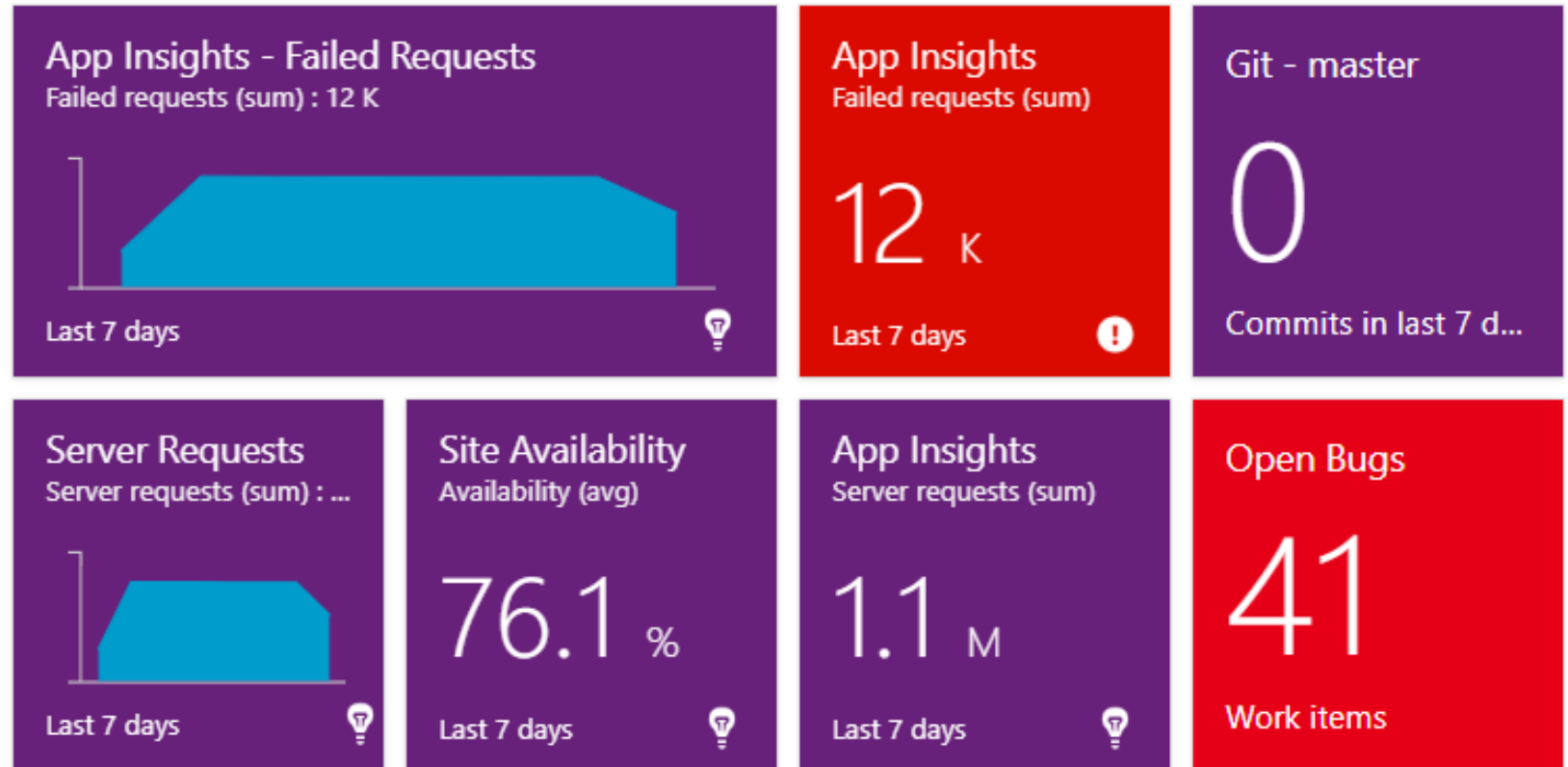
Software development teams get instant access to everything they need in a dedicated hub for teamwork, that brings your teams, conversations, content and tools from across Office 365 and Azure DevOps together into one place.



<https://marketplace.visualstudio.com/>

# Marketplace – Application Insights

Monitor and detect issues in your apps and services without ever leaving Azure DevOps!

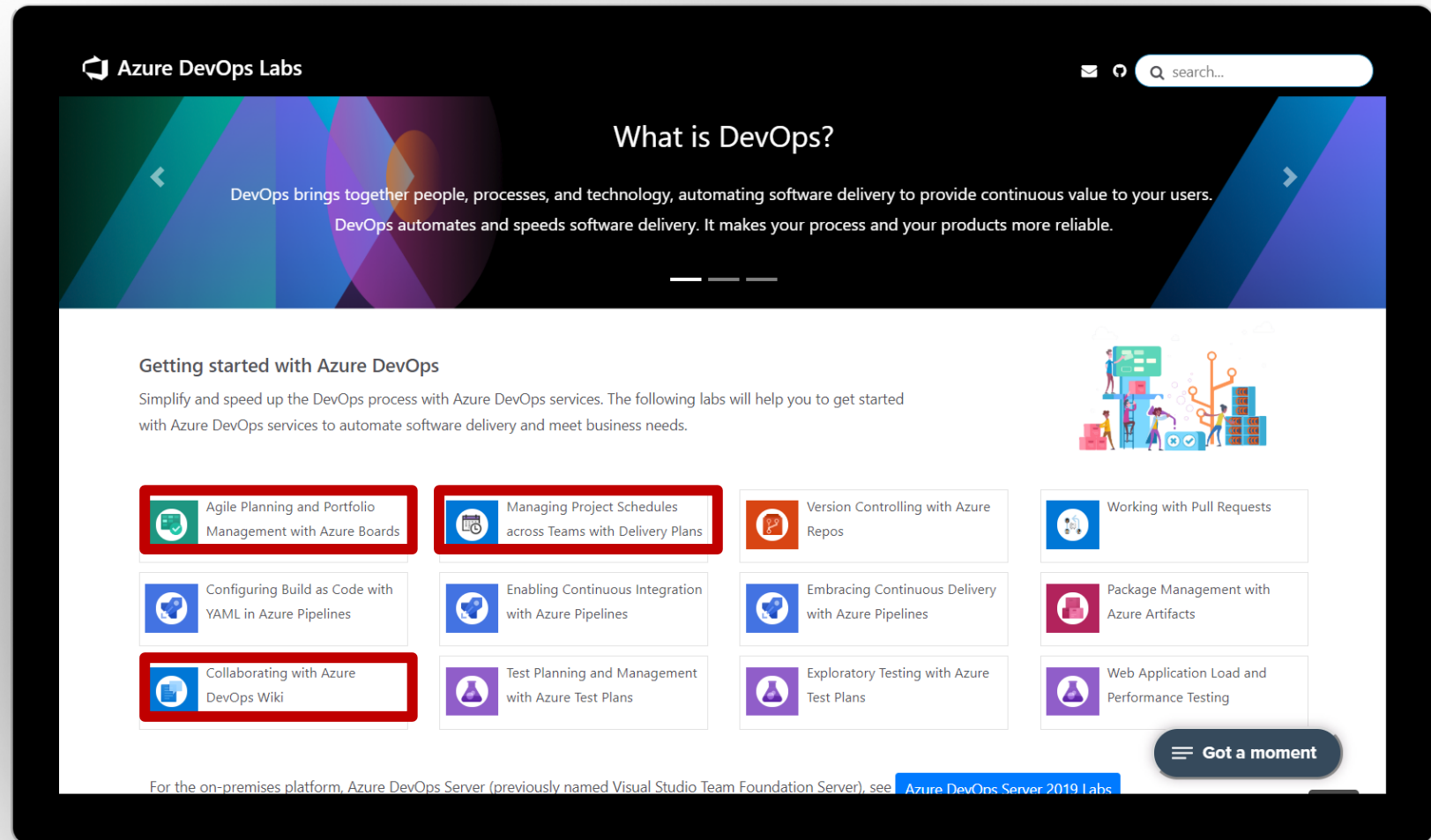


# Additional Resources

# Azure DevOps Hands-On Labs

Learn to plan smartly, collaborate better, and ship faster with a set of modern development services.

- Get Hands On Experience with Azure DevOps Services – Learn how you can plan better, code together and ship faster with Azure DevOps Services.
- Getting started - These labs will help you to get started with Azure DevOps services to automate software delivery and meet business needs.
- Deep Dive into Azure DevOps - Learn how to integrate with popular OSS and 3rd party tools and services. Use the tools and languages you know.



The screenshot displays the Azure DevOps Labs website. At the top, the header reads "Azure DevOps Labs" with a search bar on the right. Below the header is a hero section titled "What is DevOps?" with a sub-headline: "DevOps brings together people, processes, and technology, automating software delivery to provide continuous value to your users. DevOps automates and speeds software delivery. It makes your process and your products more reliable." Below this is a section titled "Getting started with Azure DevOps" with a sub-headline: "Simplify and speed up the DevOps process with Azure DevOps services. The following labs will help you to get started with Azure DevOps services to automate software delivery and meet business needs." The main content area features a grid of 12 lab cards, each with an icon and a title. The following table lists the titles of these labs:

Agile Planning and Portfolio Management with Azure Boards	Managing Project Schedules across Teams with Delivery Plans	Version Controlling with Azure Repos	Working with Pull Requests
Configuring Build as Code with YAML in Azure Pipelines	Enabling Continuous Integration with Azure Pipelines	Embracing Continuous Delivery with Azure Pipelines	Package Management with Azure Artifacts
Collaborating with Azure DevOps Wiki	Test Planning and Management with Azure Test Plans	Exploratory Testing with Azure Test Plans	Web Application Load and Performance Testing

At the bottom right of the page, there is a button labeled "Got a moment". At the bottom left, there is a footer note: "For the on-premises platform, Azure DevOps Server (previously named Visual Studio Team Foundation Server), see [Azure DevOps Server 2019 Labs](#)".

→ <https://www.AzureDevOpsLabs.com>

# Documentation - Azure DevOps Feature Index

Use this end-to-end feature index to learn about all the features available in Azure DevOps

- If you're new to Azure DevOps Services or TFS, see the [Key concepts](#)
- For a description of the core services supported through the web portal, see [Essential services](#)
- If you only save one Favorite in your browser related to Azure DevOps, this is the link to save as a favorite!
- Review the noted topics to get started fast!

The screenshot shows the Microsoft Azure DevOps documentation page. The main heading is "What are the features in Azure DevOps?". Below the heading, it says "12/13/2018 • 54 minutes to read • Contributors". The main text explains that this is an end-to-end feature index to help plan and track projects and code. A note section highlights that some features are platform dependent and lists "Azure DevOps Services" and "TFS". The page also includes a sidebar with navigation links like "Manage projects", "Overview", "Quickstarts", "Tutorials", "Concepts", "How-to guides", "Troubleshooting", "Reference", and "Features index". A right sidebar lists "In this article" topics such as "Access and supported clients", "Agile tools to plan and track work", "Alerts and notifications", "Code", "Azure Artifacts", "Continuous delivery", "Dashboards and reports", "Extensibility", "Global", "Monitor", "Navigation", "Search, queries, and filters", "Security", "Set up and installation", "Teams, team projects, and processes", and "Traceability".

→ <https://Docs.Microsoft.com/en-us/Azure/DevOps/User-Guide/ALM-DevOps-Features>



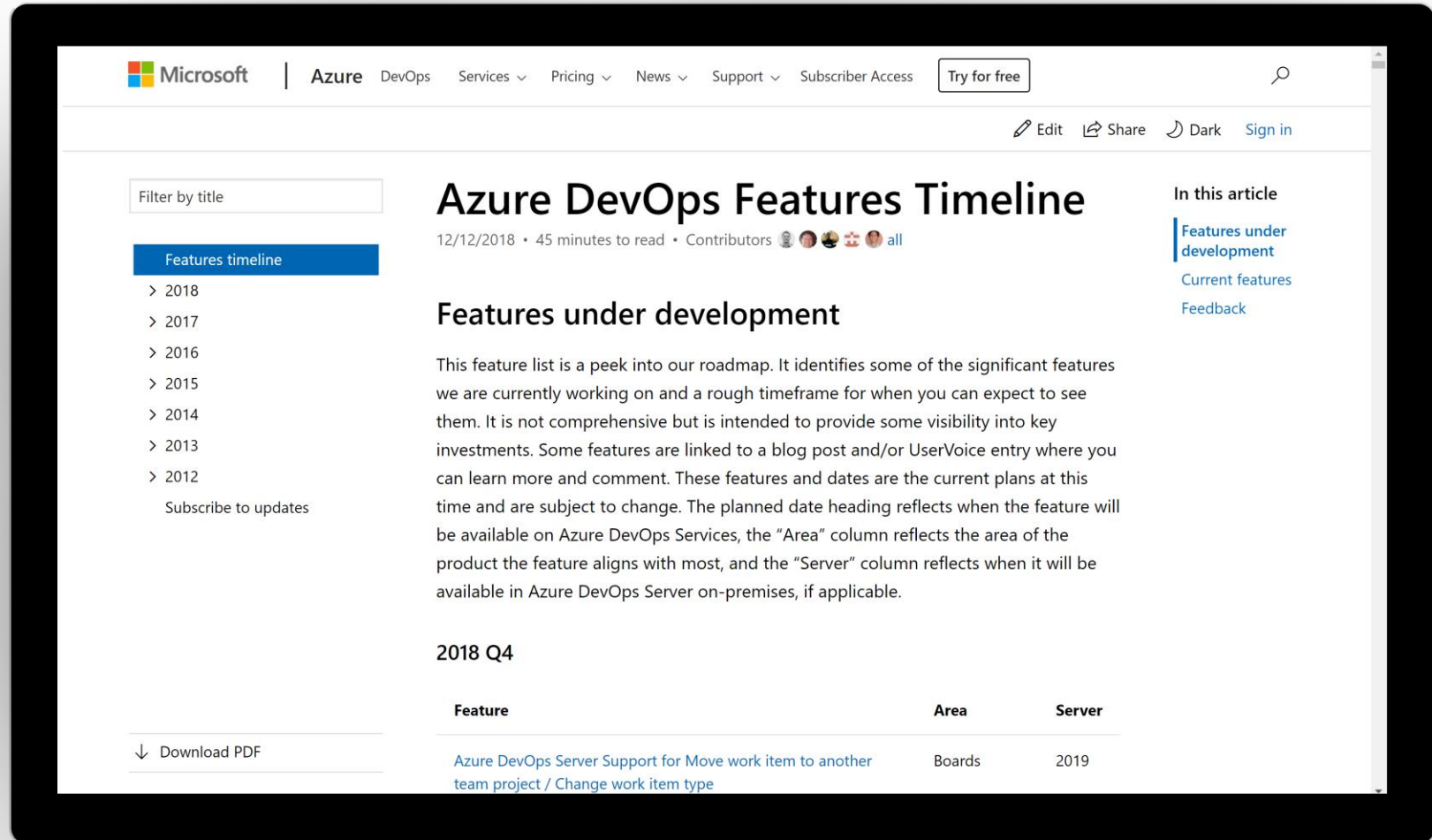
# Azure DevOps Features Timeline

## Azure DevOps Features Roadmap and Release Notes

→ Take a peek into our roadmap. See the significant features we are working on and a rough timeframe for when you can expect to see them

→ We deploy updates frequently. Review the release notes for each three week sprint

→ Subscribe to this page to get notified when we provide new release notes and roadmap updates



The screenshot shows the Microsoft Docs website for the "Azure DevOps Features Timeline" article. The page includes a navigation bar with the Microsoft logo and links for Azure, DevOps, Services, Pricing, News, Support, and Subscriber Access. A "Try for free" button is also present. The article title is "Azure DevOps Features Timeline", dated 12/12/2018, with a 45-minute read time. The main content area is titled "Features under development" and contains a paragraph explaining that the list is a peek into the roadmap, identifying significant features and their rough timeframes. Below the text, there is a section for "2018 Q4" which contains a table with columns for "Feature", "Area", and "Server".

Feature	Area	Server
<a href="#">Azure DevOps Server Support for Move work item to another team project / Change work item type</a>	Boards	2019

→ <https://Docs.Microsoft.com/en-us/Azure/DevOps/Release-Notes/>

# Learn DevOps in the DevOps Resource Center

This center combines our resources on learning DevOps practices, Git version control, Agile methods, how we work with DevOps at Microsoft, and how you can assess your own DevOps progression

- Learn DevOps - DevOps is the union of people, process, and products to enable continuous delivery of value to our end users
- DevOps at Microsoft - This center will keep you current on how we adopt DevOps at Microsoft
- DevOps Self-Assessment - Get tailored recommendations on how to improve your organization's ability to develop and deliver value to customers, pivot when necessary, and beat competitors to market

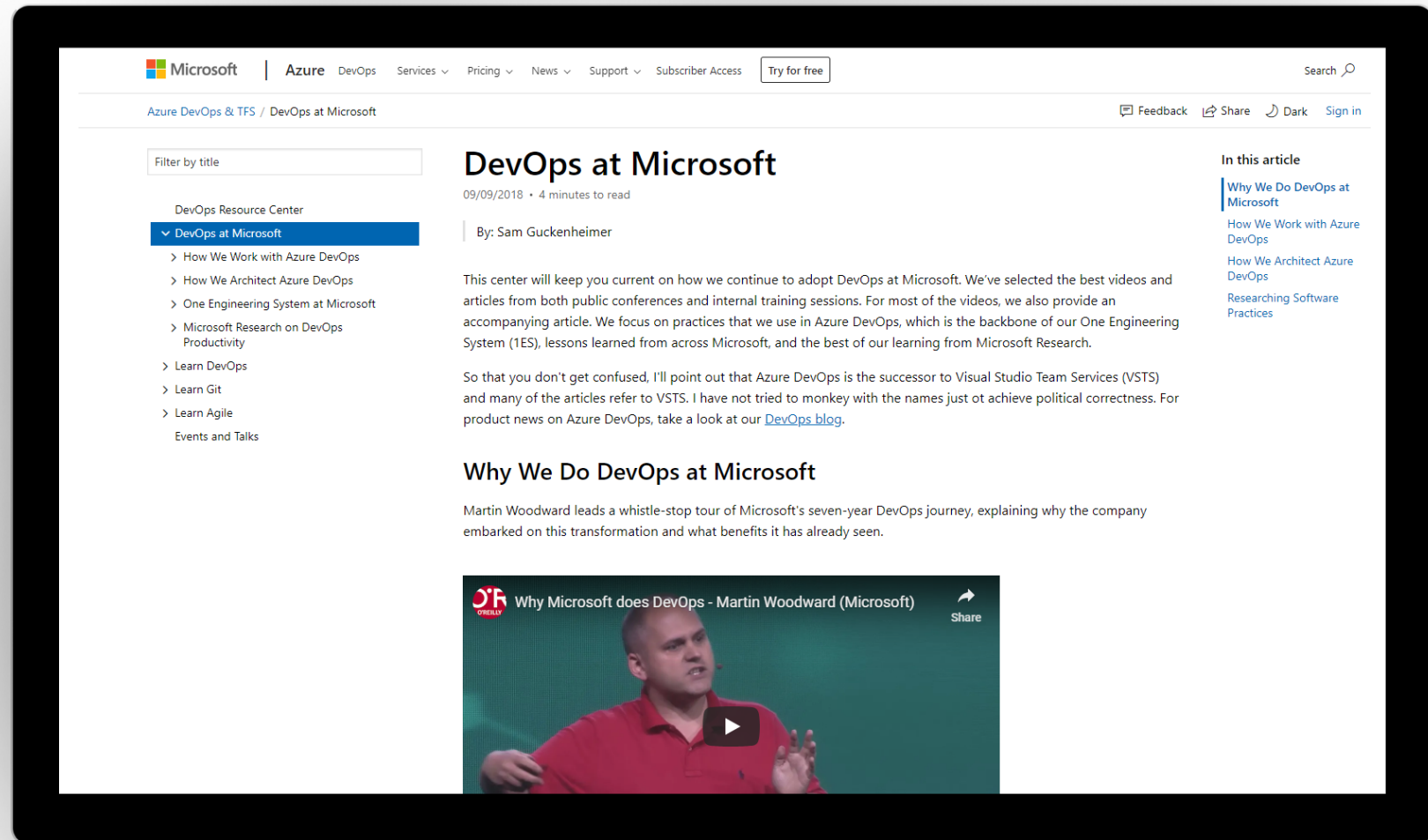
The screenshot shows the Microsoft DevOps Resource Center website. The navigation bar includes the Microsoft logo, 'Visual Studio', 'Visual Studio Team Services', and various utility links like 'Features', 'Pricing', 'News', 'Support', 'Subscriber Access', and a 'Free Account' button. A search bar and 'Sign in' link are also present. The main content area is titled 'DevOps Resource Center' and features a 'Filter by title' search box. A sidebar menu on the left lists navigation options: 'DevOps Resource Center', 'DevOps at Microsoft', 'Learn DevOps', 'Learn Git', 'Learn Agile', and 'Events and Talks'. The main content area contains six cards, each with an illustration and a title: 'Learn DevOps', 'Learn Git', 'Learn Agile' (highlighted with a red border), 'DevOps at Microsoft', 'DevOps Events and Talks', and 'DevOps Self-Assessment'. Each card provides a brief description of the resource.

→ <http://aka.ms/DevOps>

# DevOps at Microsoft

Learn from our DevOps journey and share our lessons learned with your team

- Create a series of “Lunch & Learn” sessions. Watch a video and have a follow up discussion with your team
- Or, treat it like a book club, i.e. have everyone watch a video and read the related narrative, then discuss it over lunch
- Either way, discuss with your team what is/is not applicable to your company, (or, what should be applicable in the future!)



The screenshot shows the Microsoft DevOps at Microsoft resource center page. The page features a navigation bar with the Microsoft logo, Azure DevOps Services, Pricing, News, Support, and Subscriber Access. The main content area is titled "DevOps at Microsoft" and includes a filter by title input field. The page is organized into a sidebar with a "DevOps Resource Center" section, a "DevOps at Microsoft" section, and a list of sub-topics: "How We Work with Azure DevOps", "How We Architect Azure DevOps", "One Engineering System at Microsoft", "Microsoft Research on DevOps Productivity", "Learn DevOps", "Learn Git", "Learn Agile", and "Events and Talks". The main content area contains an article titled "DevOps at Microsoft" by Sam Guckenheimer, dated 09/09/2018, with a 4-minute read time. The article text discusses the center's purpose and the transition from VSTS to Azure DevOps. A video player is embedded at the bottom of the article, showing a presentation by Martin Woodward titled "Why Microsoft does DevOps - Martin Woodward (Microsoft)". The video player includes a play button and a share icon.

→ <http://aka.ms/DevOpsAtMicrosoft>



# Thank You

ευχαριστώ    Salamat Po    متشكراً    شكراً    Grazie  
благодаря    ありがとうございます    Kiitos    Teşekkürler    谢谢  
ឧបត្ថម្ភ    Obrigado    شكریه    Terima Kasih    Dziękuję  
Hvala    Köszönöm    Tak    Dank u wel    ДЯКУЮ    Tack  
Mulțumesc    спасибо    Danke    Cám ơn    Gracias  
多謝晒    Ďakujem    תודה    நன்றி    Děkuji    감사합니다