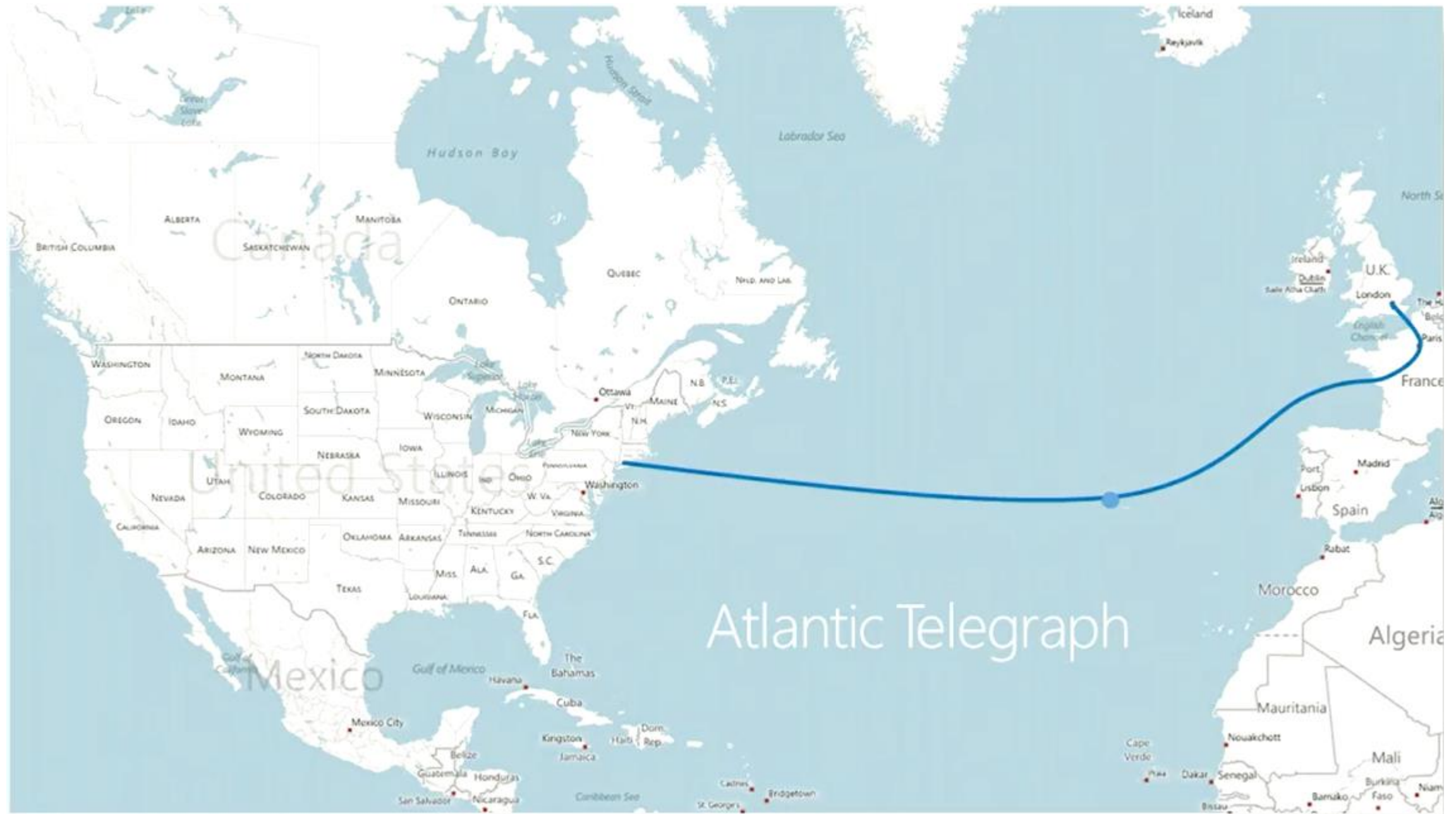


Agile at Microsoft & TFS

Murat Odabasi
Senior Premier Field Engineer
Microsoft

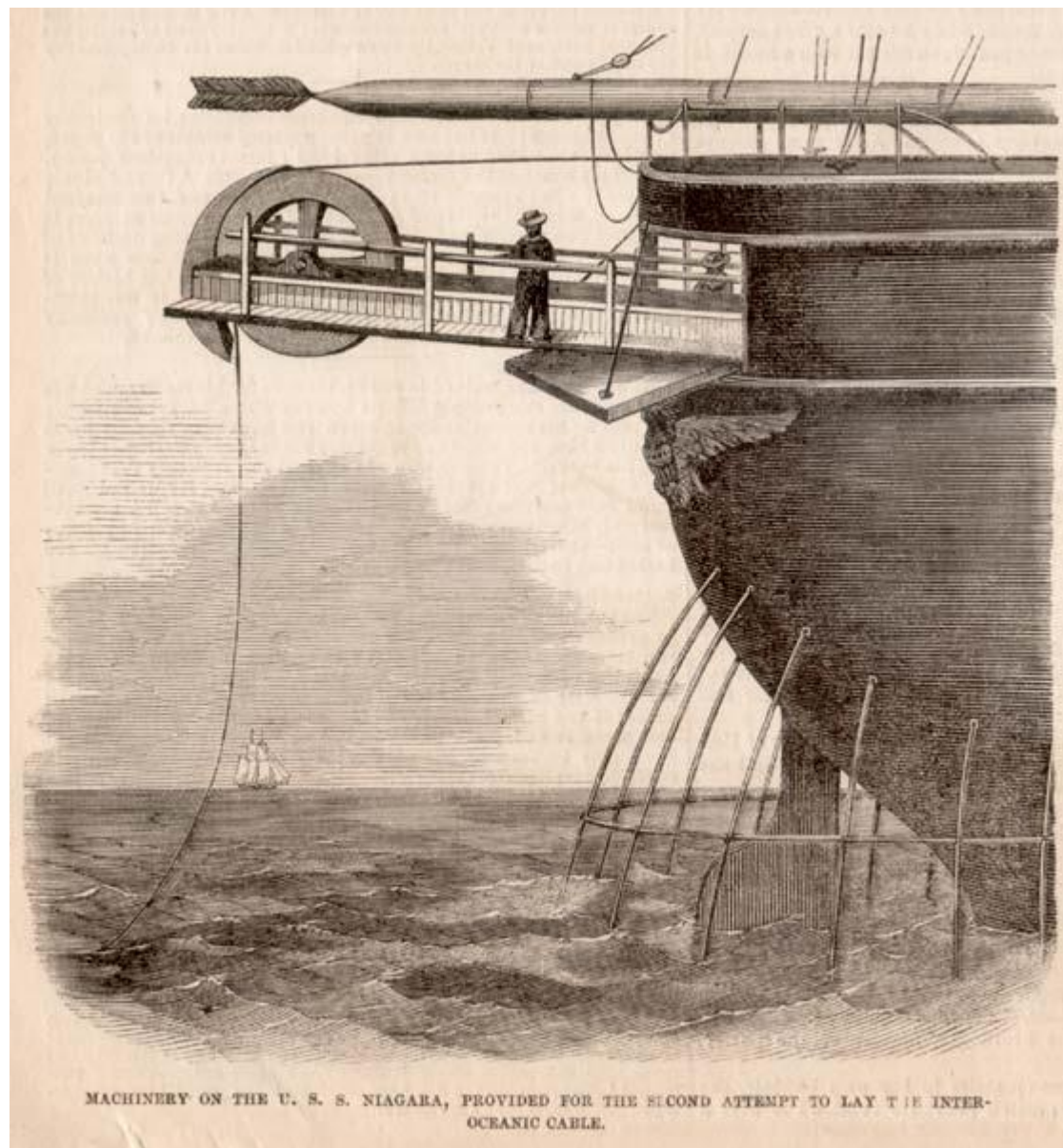






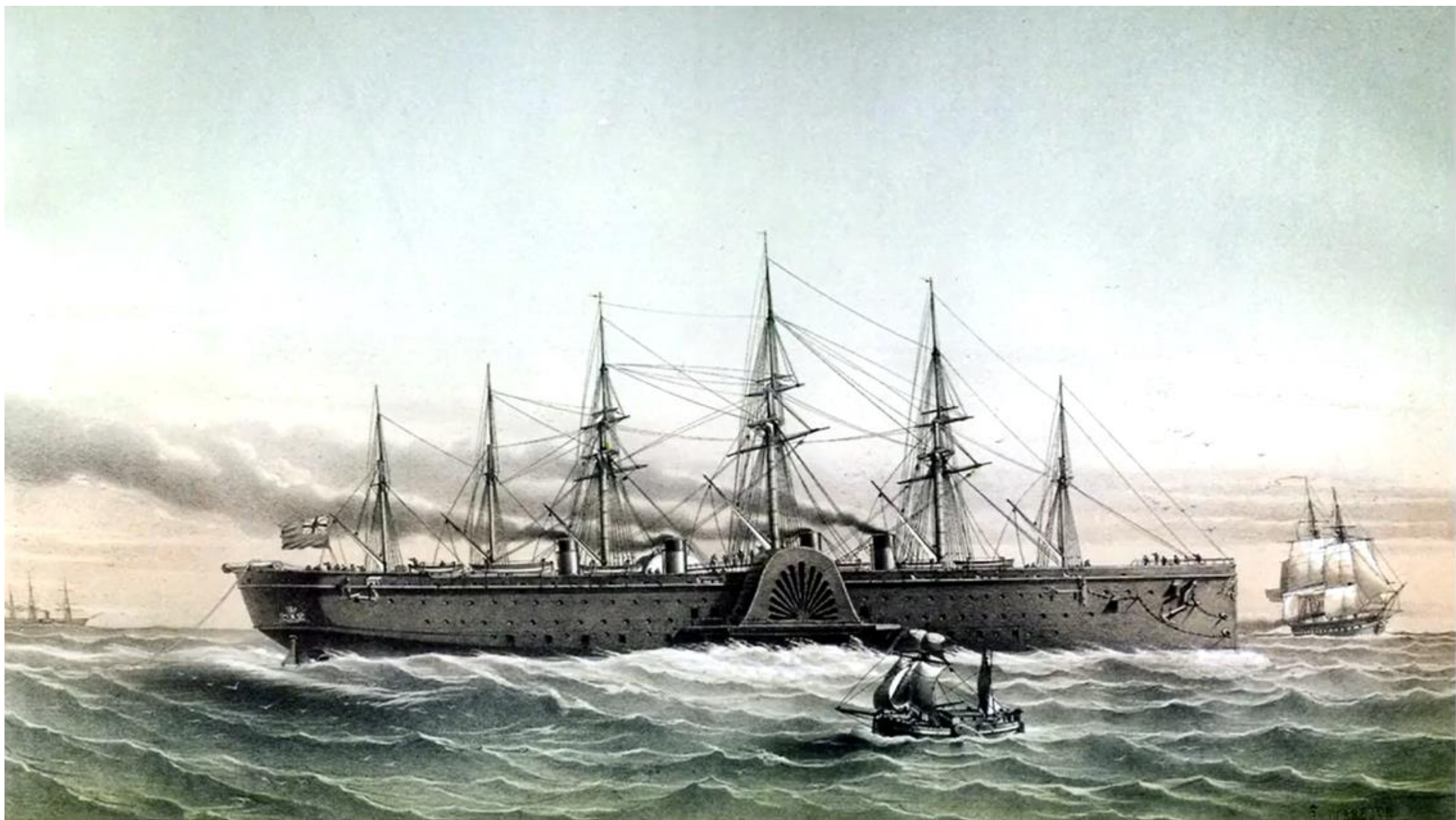
TELEGRAPH CHART

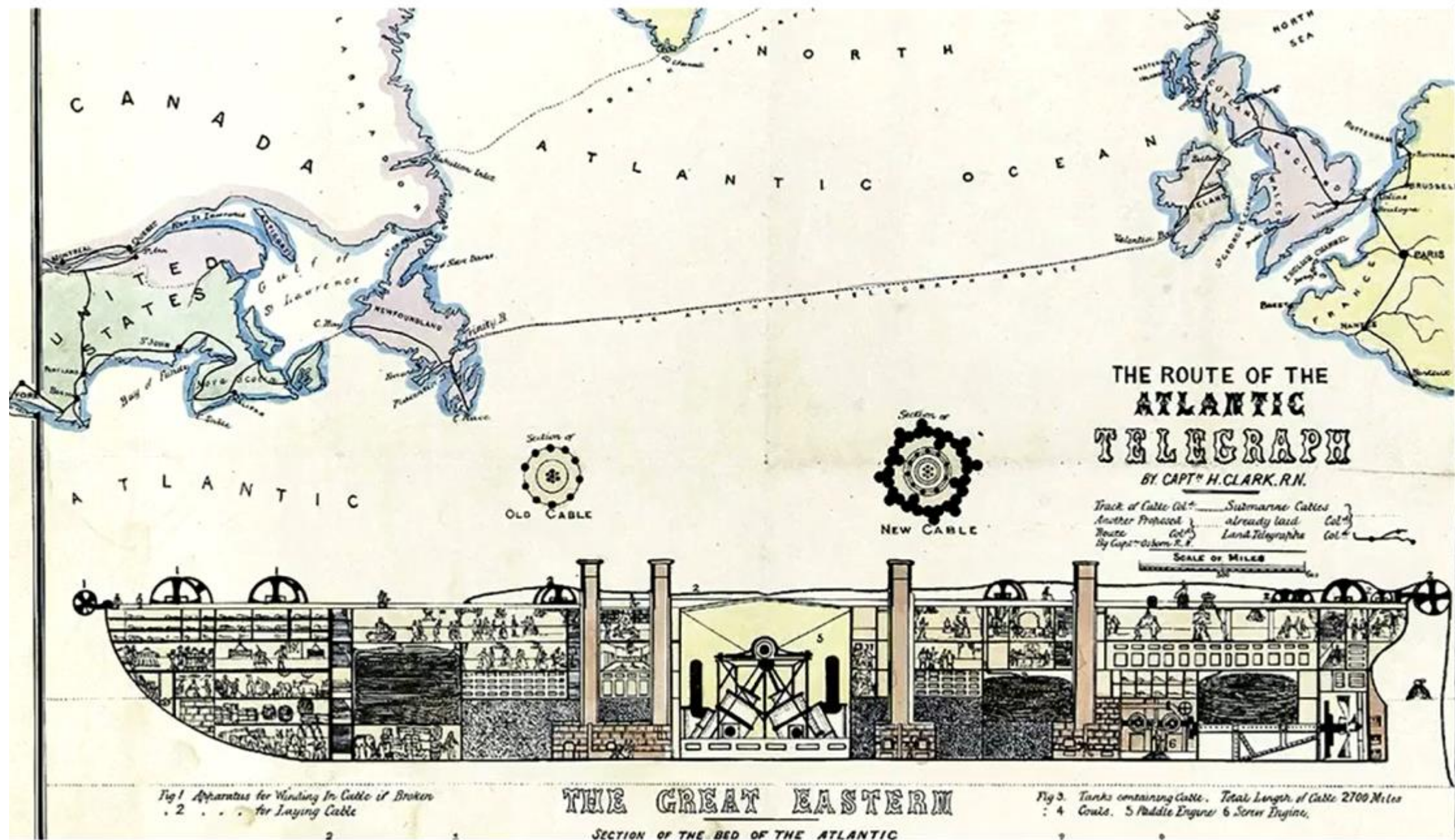
[illegible][illegible][illegible]



MACHINERY ON THE U. S. S. NIAGARA, PROVIDED FOR THE SECOND ATTEMPT TO LAY THE INTER-OCEANIC CABLE.







The punchline

There is no single way Agile is done at Microsoft

This is the Developer Division's story

- 3 week sprints
- Scrum at the team level
- Emphasis on self-managed teams
- Top-down and bottom-up

Setting the stage

Why Now?

Changes are shipping continuously

- The platforms and technologies we rely on
- The applications and processes that rely on us

IT has shifted from manufacturing to software/services development

Why Agile?

Ensures we focus on focused on what customers need

Enables us to clearly articulate the why, what and when of our work

Aligns us with each other and with our customers

Ensures that we can't go "more wrong" than one month

What is Agile

At its “core” ...

The Agile Manifesto ([link](#))
12 Principals ([link](#))

In structure...

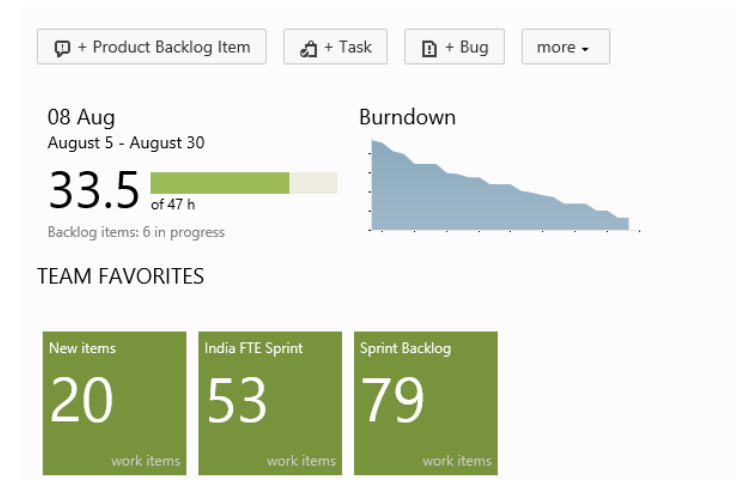
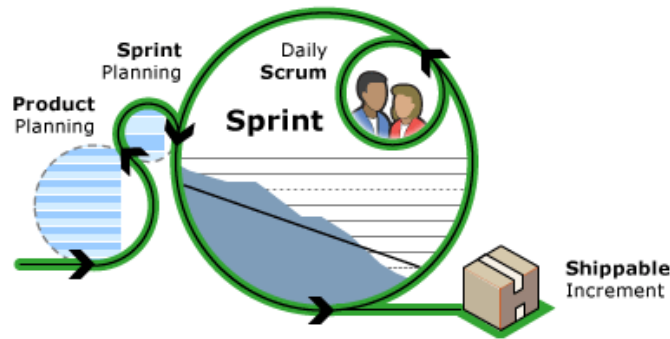
Backlog
Sprints
Shipped features

In Practice

Visual Studio Team Foundation
Agile Template

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.

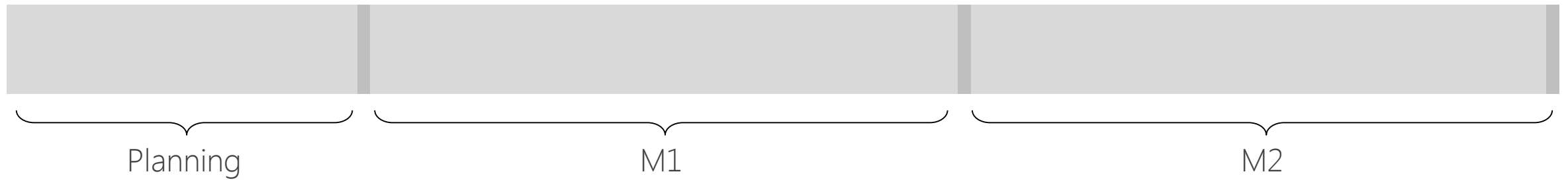


OLD: Schedule

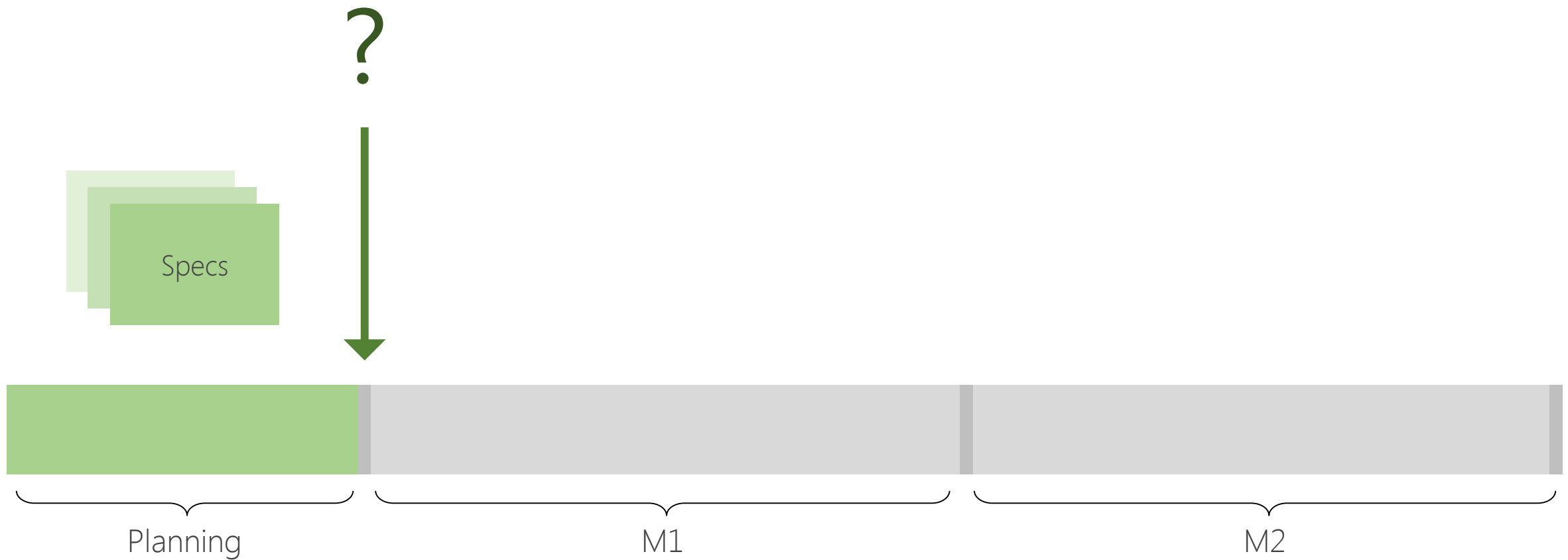


2 years

OLD: Schedule

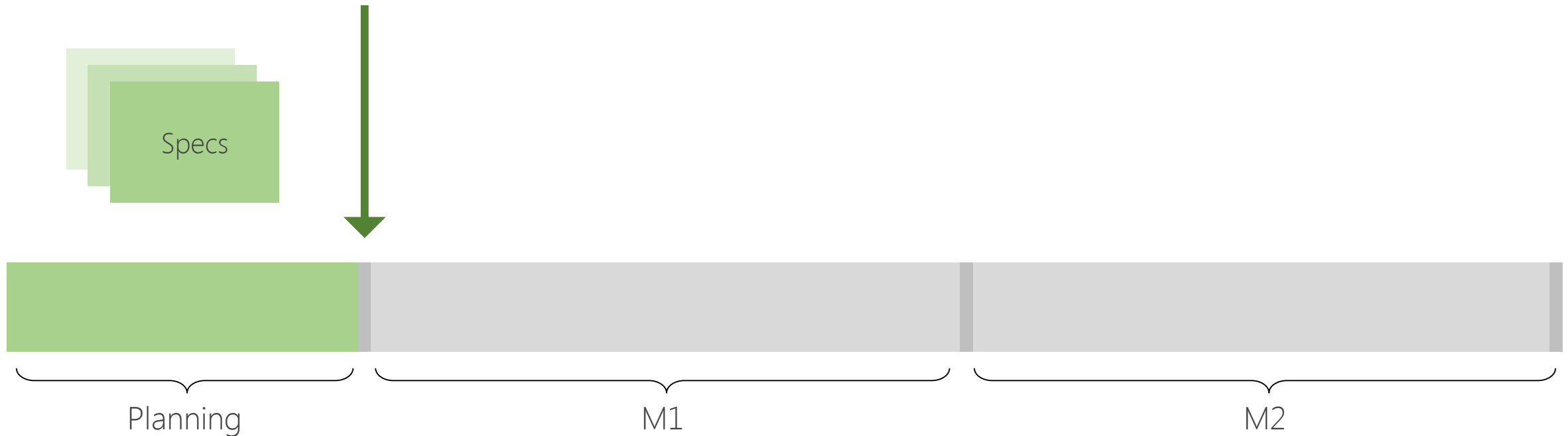


OLD: Planning



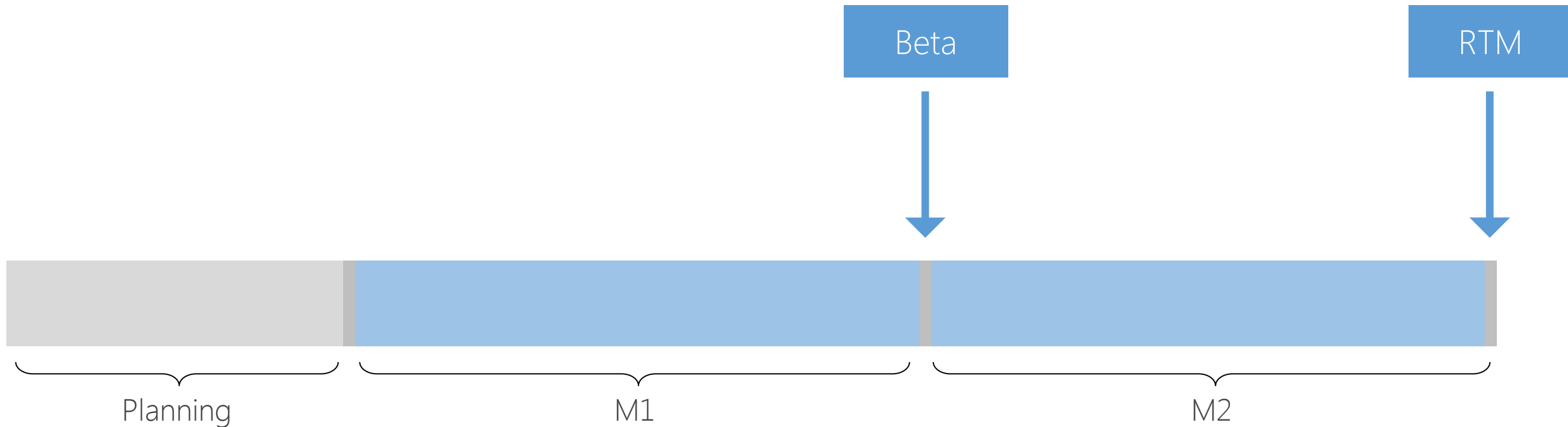
OLD: Planning

We knew **exactly** what to build,
and we **knew** it was right!



OLD: Milestones

We had a **perfect** schedule and knew exactly when it would be ready!



OLD: Milestones

We now had **perfect estimates** and we understood how it would all come together!



OLD: Writing code

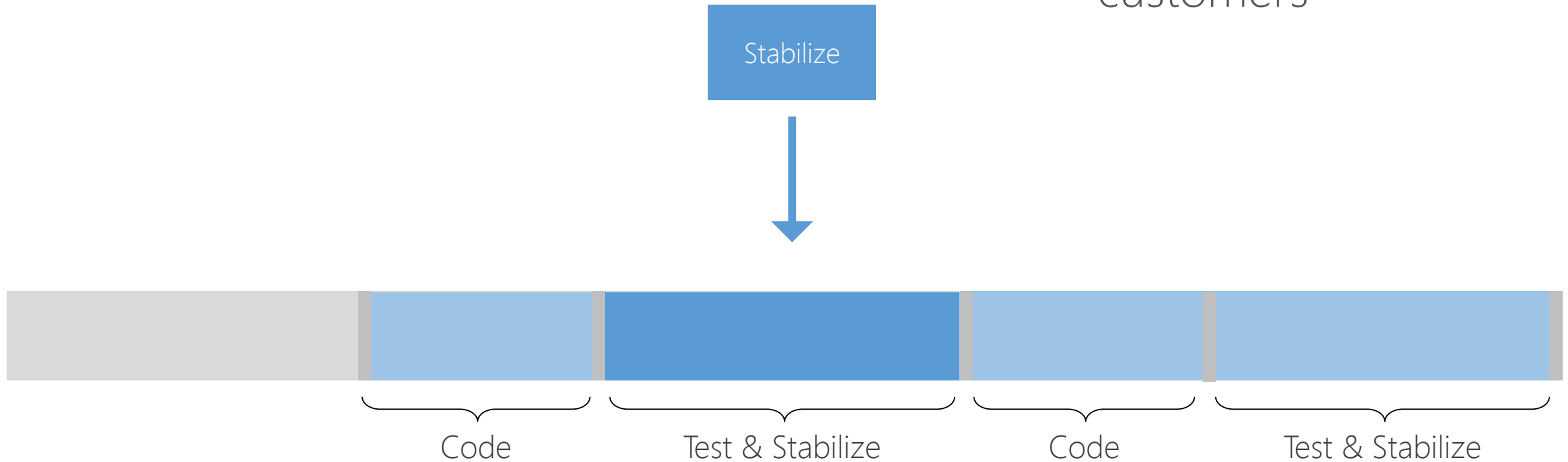
Code
Complete

We wrote **all the code** months before
we shipped a release.



OLD: Fixing bugs

We now **just needed to stabilize** the code and get it ready to ship to customers



Q: How did it work?

A: Very well in the era in which it was born. But...

What were the problems?

Bug Debt

No way to react to customer feedback

Success was a one time shoot

Very little team autonomy

Times have changed!

"Firms today experience a much higher velocity of business change. Market opportunities appear or dissolve in months or weeks instead of years."

Diego Lo Giudice and Dave West, Forrester
February 2011
Transforming Application Delivery

Video : Agile Shift in Microsoft

Sprint

3-week sprints

3

Season

6 month season

6

Vision

18 month vision

18

Our roles



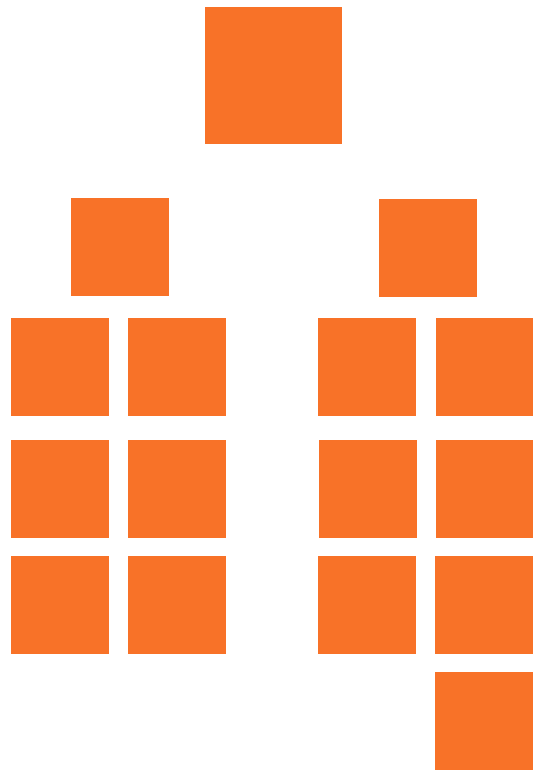
Program Manager – Responsible to ensure we're building the right thing.



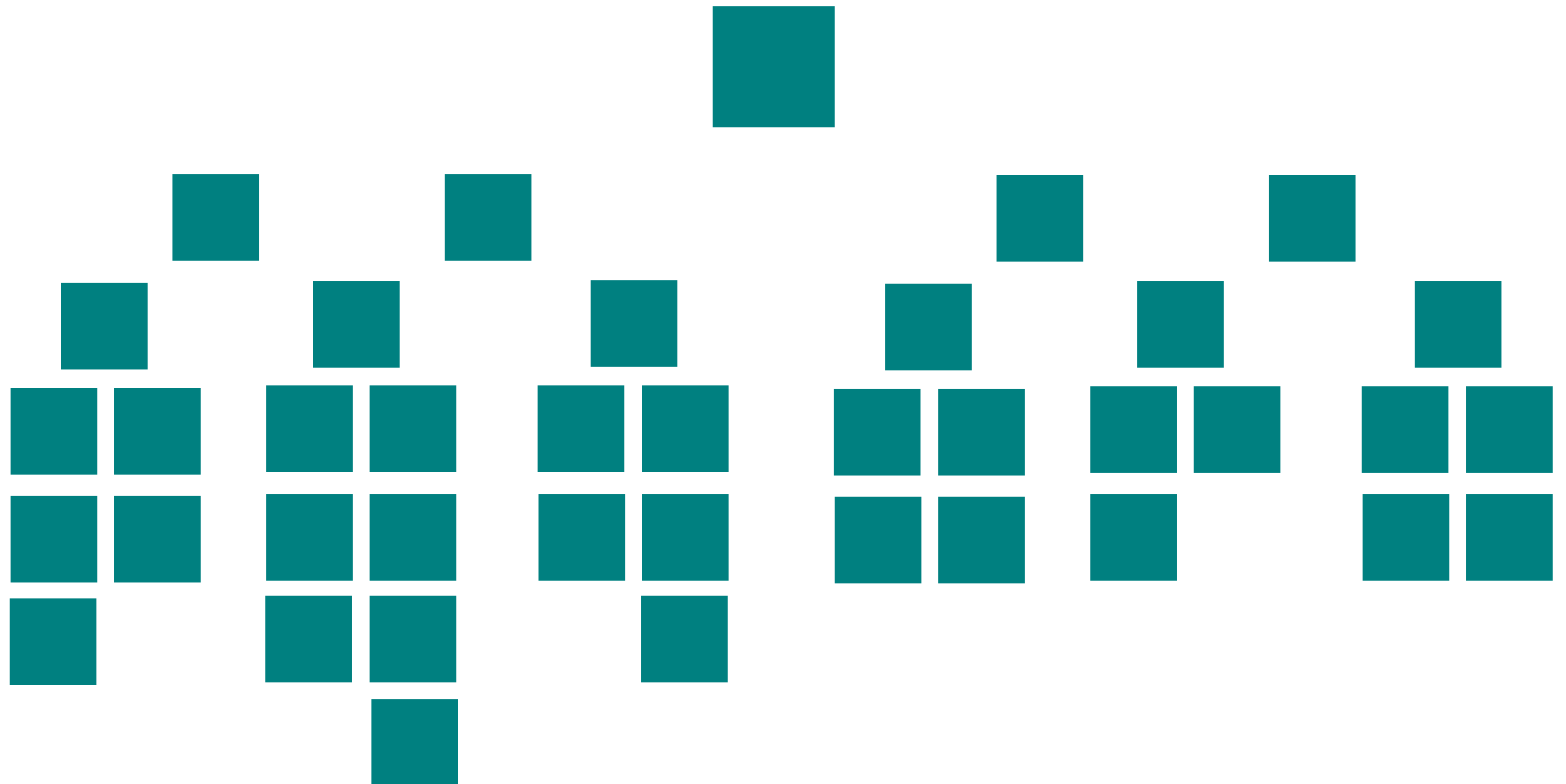
Engineer – Responsible to ensure we're building products that are fast, reliable, and well engineered.

Organization chart

Program Management

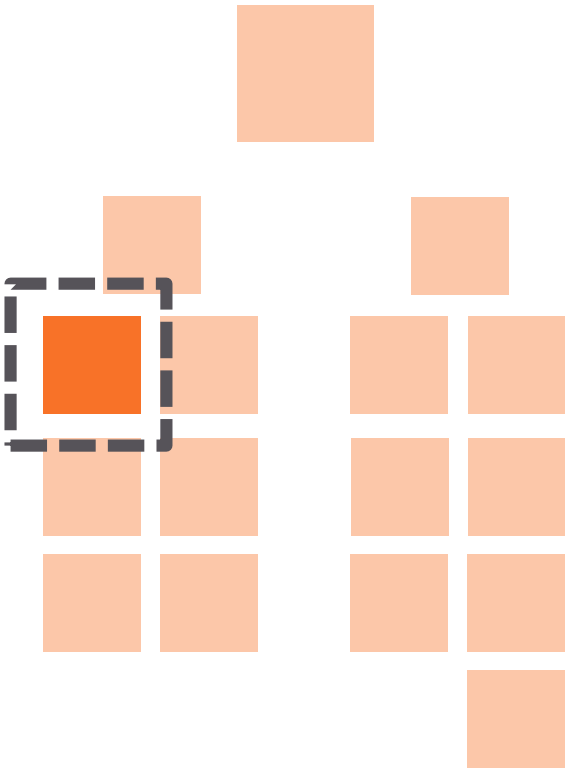


Engineering

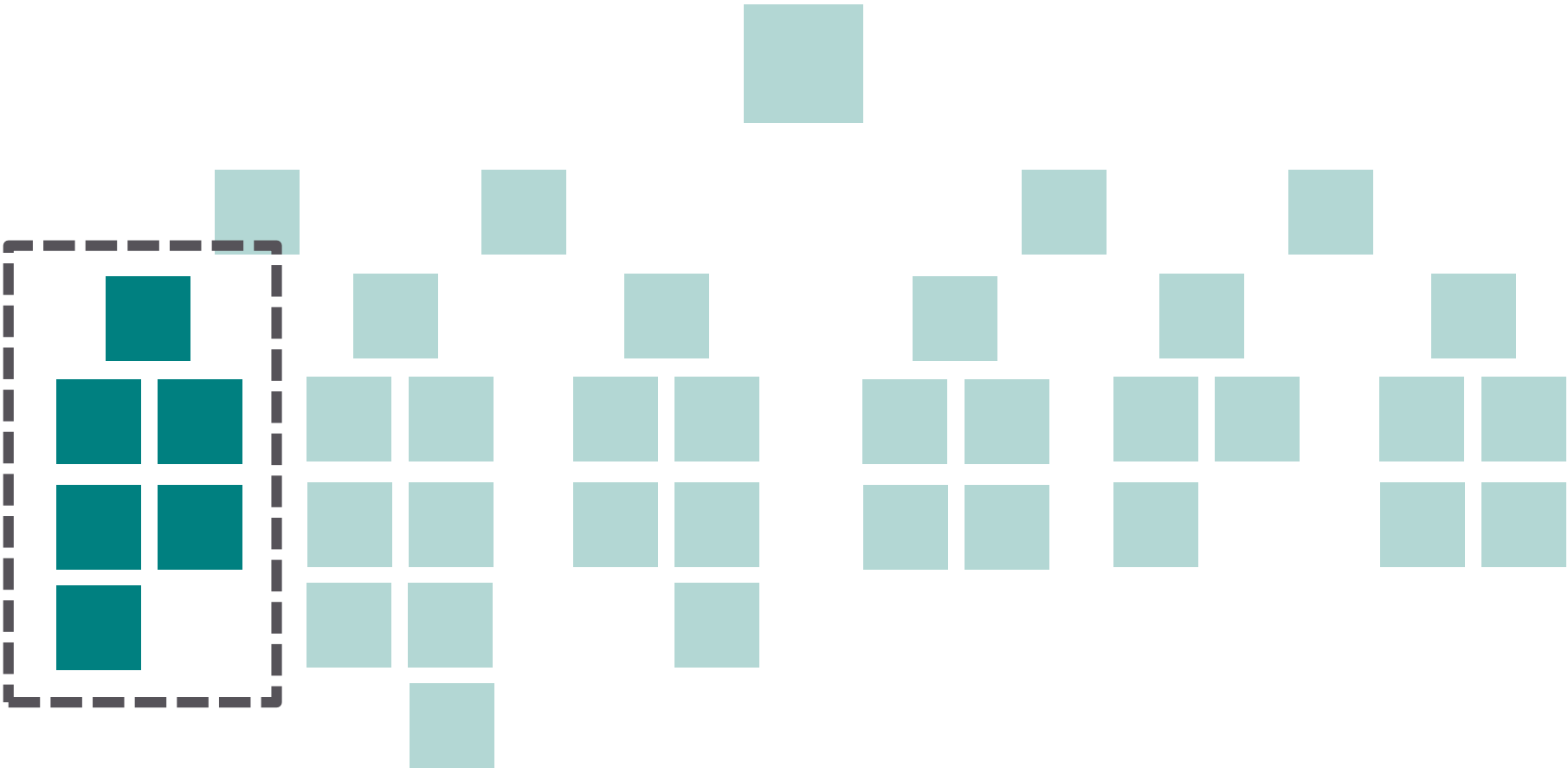


Our teams

Program Management

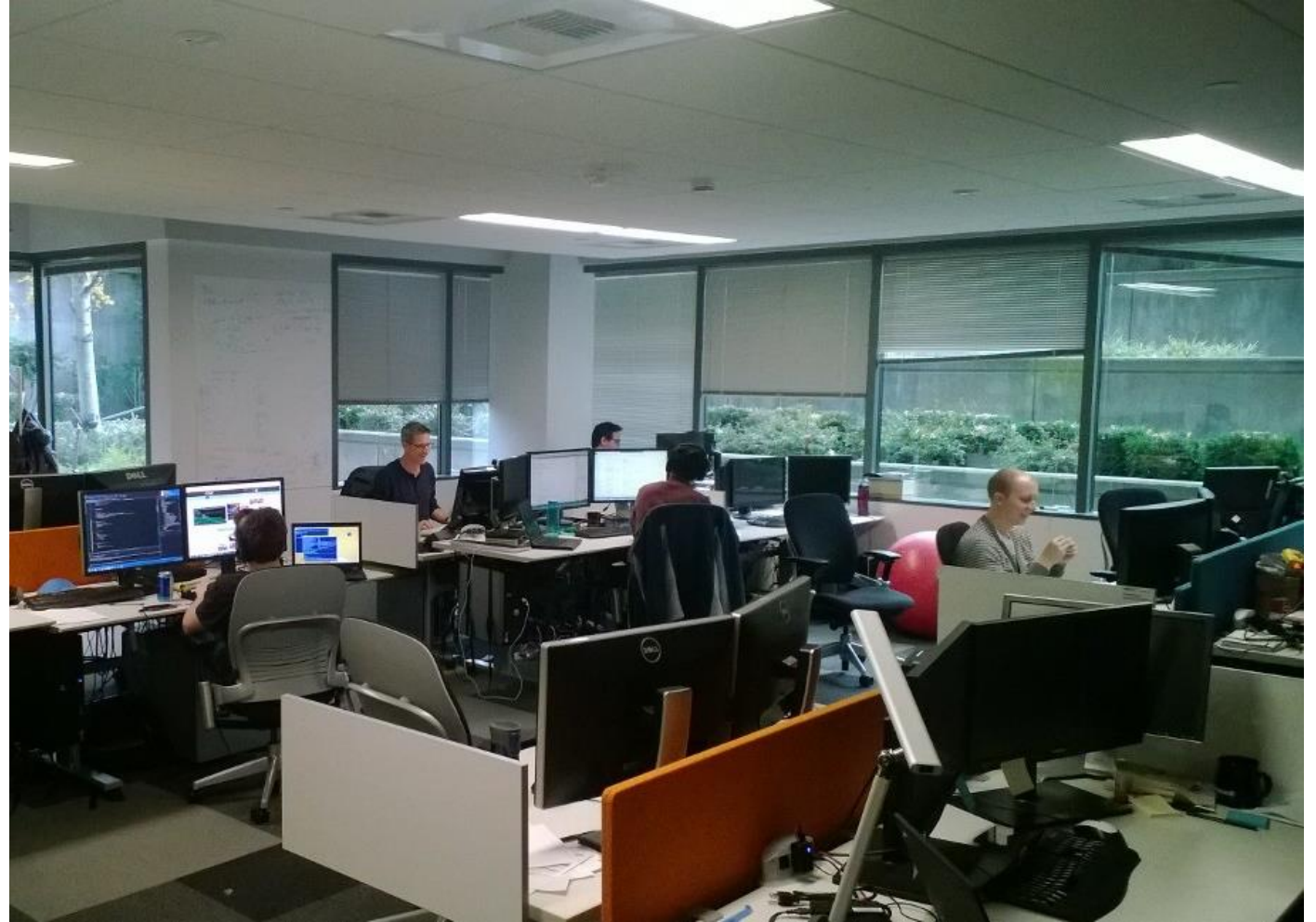


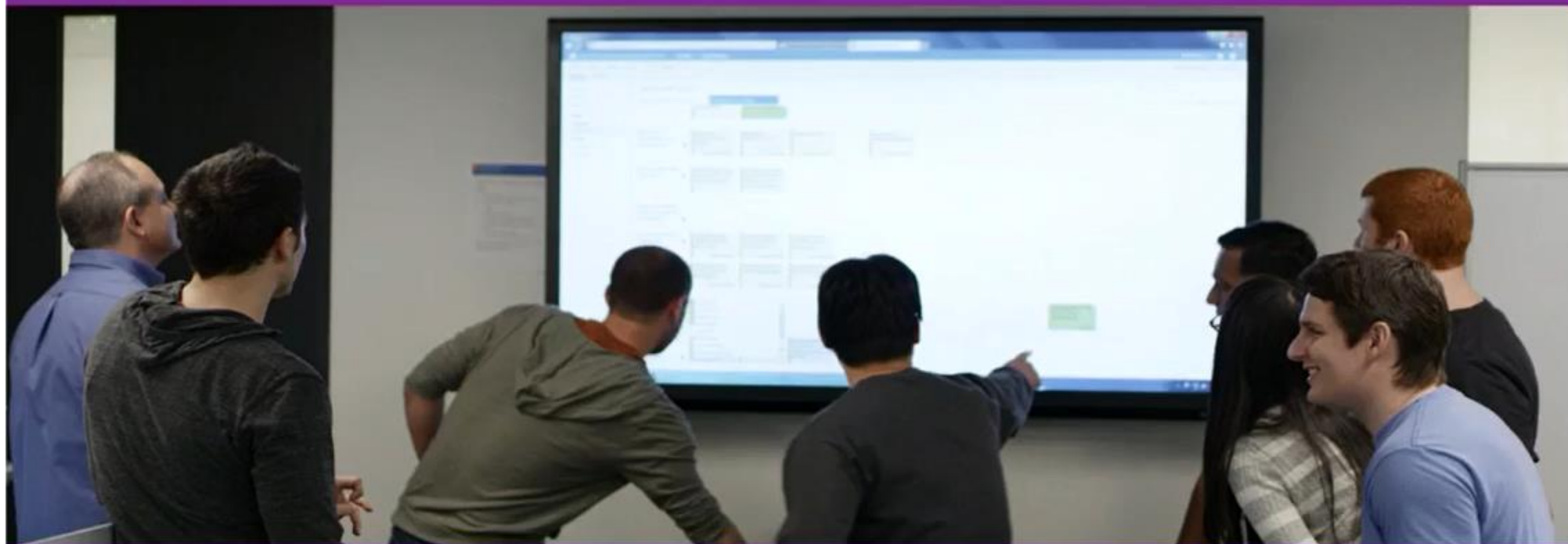
Engineering



Teams

- Cross discipline
- 10-12 people
- Self managing
- Autonomous backlog
- Intact for 12-18 months
- Physical team rooms





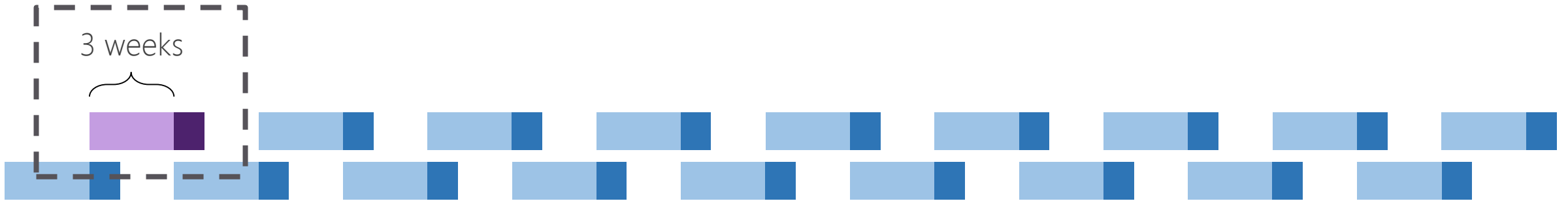
Team Rooms

Q: What about remote employees?

Question?

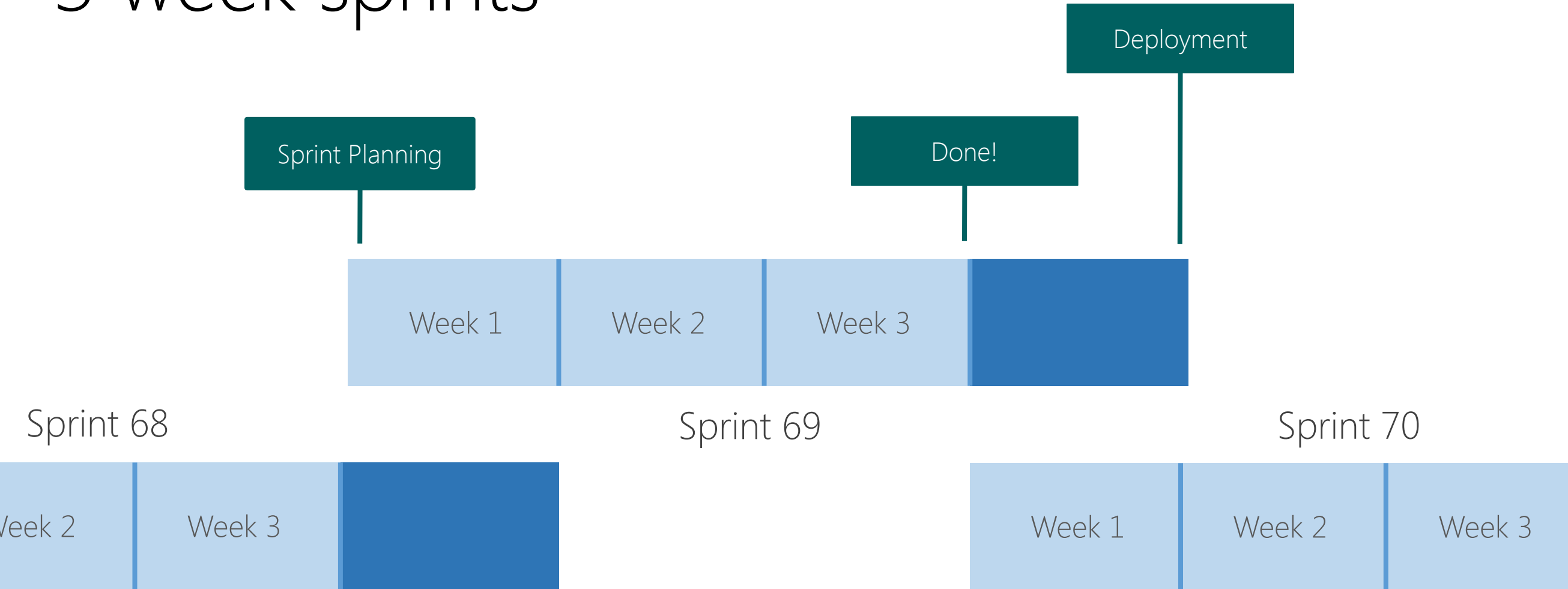
- Yes, we do have some remote individuals. It's the exception, not the rule.
- We aim for remote teams, not remote disciplines.

3 week sprints





3 week sprints



3 week sprints

The sprint plan



What we accomplished



Sprint 68



Sprint 69



Sprint 70

Sprint mails

Plan



Collaboration - Sprint 41 Plan - Message (HTML)

FILE MESSAGE

Mon 12/3/2012 12:42 PM

David Gorena Elizondo
Collaboration - Sprint 41 Plan

To VS Cloud Services All

Cc TFS Collaboration

Retention Policy Delete after 1 year (1 year) Expires Never

Our team has started to collaborate with VC folks on the user story that will enable the E2E for GIT scenarios. We expect to be done with this E2E experience this sprint. We acknowledge the fact that we're entering 'holiday' sprints, but our goals will also include remaining under the bug cap, completing our engagement with the Airstream team, and continuing the 'Team room' momentum with a more formalized design after the spiking that happened last sprint.

Goals

- Remain under the bug cap
- Collaborate with the VC team on enabling the E2E for the GIT story
- Continue the 'Team Room' momentum with a more formalized design

User Stories

ID	Title	Goal for end of sprint
832408	Bugs (Starting sprint with 23)	Remain under the bug cap
987548	I can mention a work item (#ID) as part of a GIT commit	Enable, together with the VC team, the E2E story
983673	Airstream	Complete engagement with the Airstream team
1021717	I can understand our design approach for the virtual Team Room	Start on a more formalized design for Team Room

Thanks,
[The Collaboration team](#)

David Gorena Elizondo RE: Can't edit HTML field in Excel - in some situations

Accomplished



Collaboration - Sprint 41 Results - Message (HTML)

FILE MESSAGE

Thu 1/3/2013 9:38 AM

Justin Marks
Collaboration - Sprint 41 Results

To VS Cloud Services All

Cc TFS Collaboration

You forwarded this message on 1/7/2013 8:54 AM.

Even with the holidays the team was able to get a bunch of stories completed. The Collaboration team has really embraced collaborating with other feature teams:

- We've had a strong collaboration with the VC team on delivering an E2E story around linking GIT commits to work items as can be seen in the below sprint video
- We worked with the Airstream team to pull down and validate the RI so that the discussion service is now being built in production using Airstream
- With the help of the WIX team we added the ability to send email from the product backlog

All the while we continued to stay on top of bugs dropping below 20!

Sprint Demo

TFS Collaboration
Sprint 41 Demo

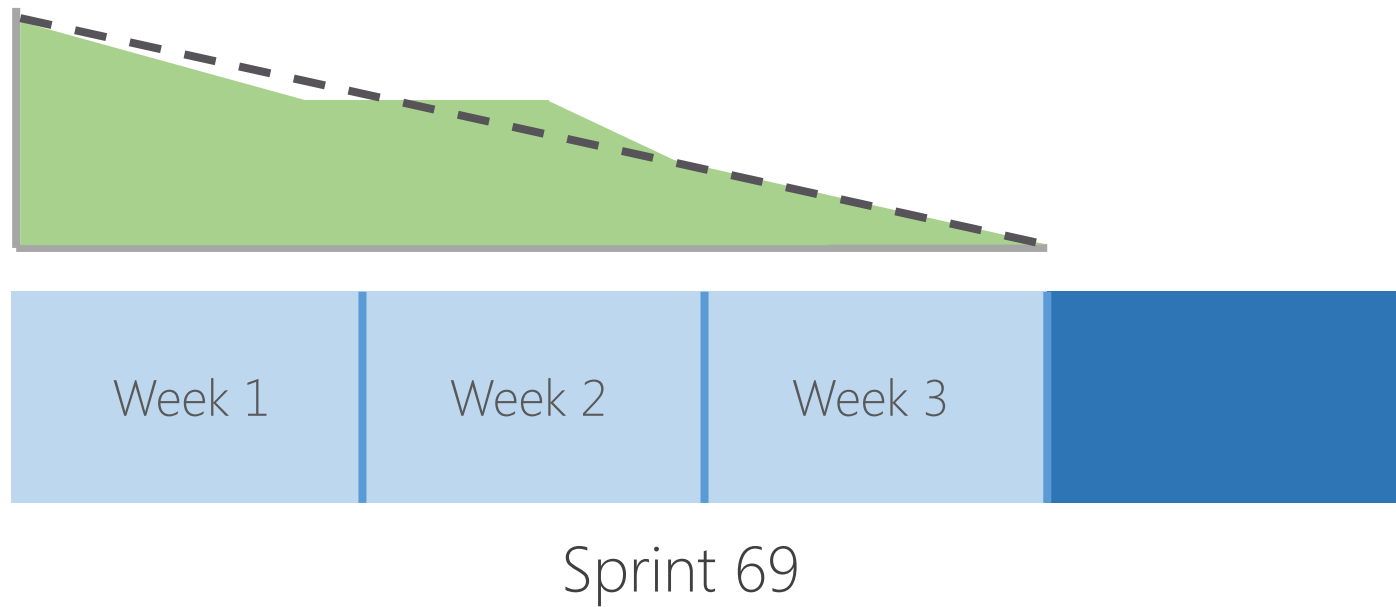
GIT work item association

Justin Marks RE: TFS 2012 - Excel integration: Hide "hidden" work item types

Video : The New Formal

Q: What do you track?

Question?



Q: What do you track?

Question?

Things we watch

- # of bugs
- Unit test coverage
- Rolling build quality
- Dev cycle time
- Live site issues

Things we don't watch

- Team burndown
- Team velocity
- Original estimate
- Completed hours
- Team capacity

Sprint

3-week sprints

3

Season

6 month season

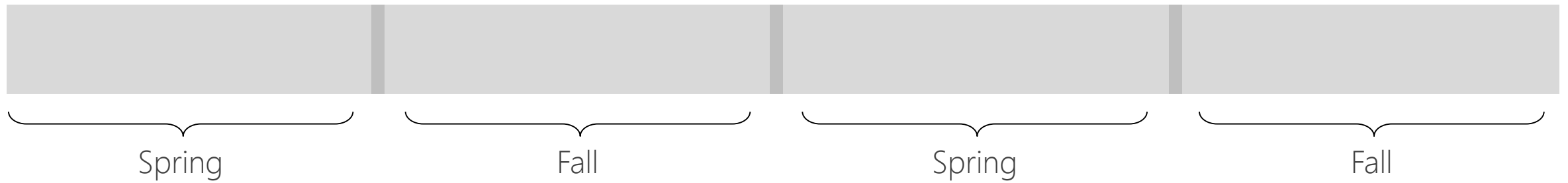
6

Vision

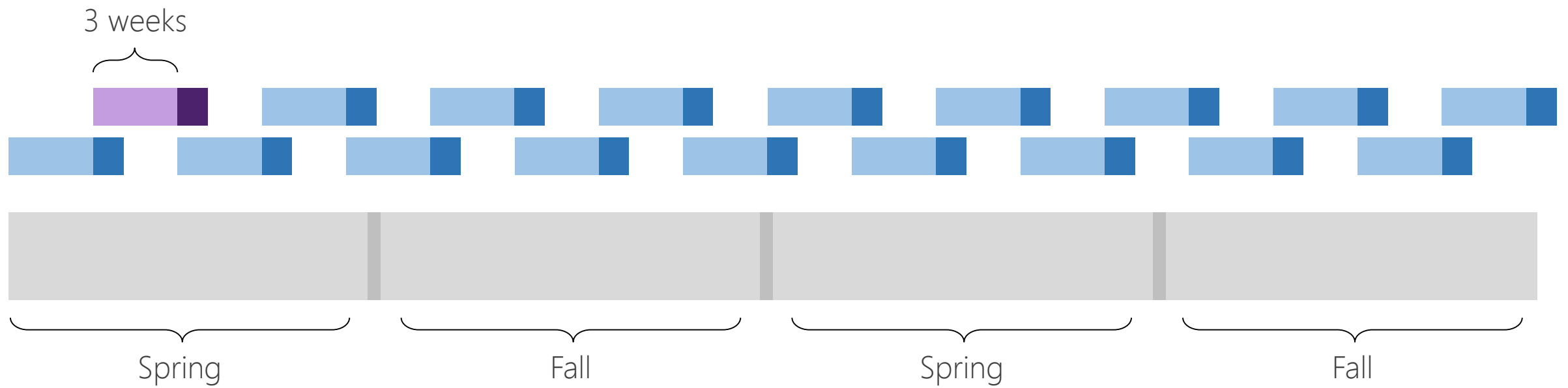
18 month vision

18

Seasons

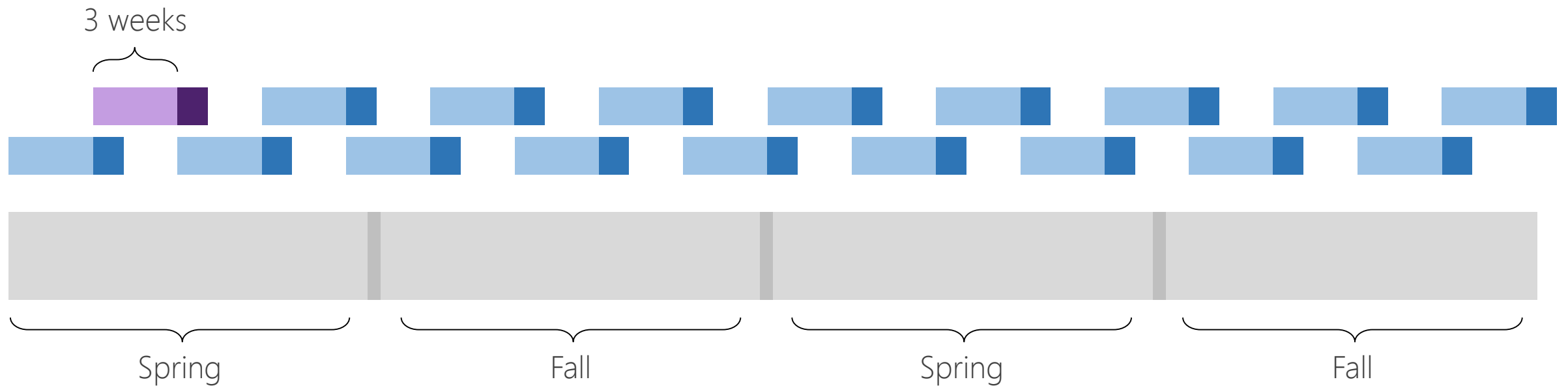


Seasons

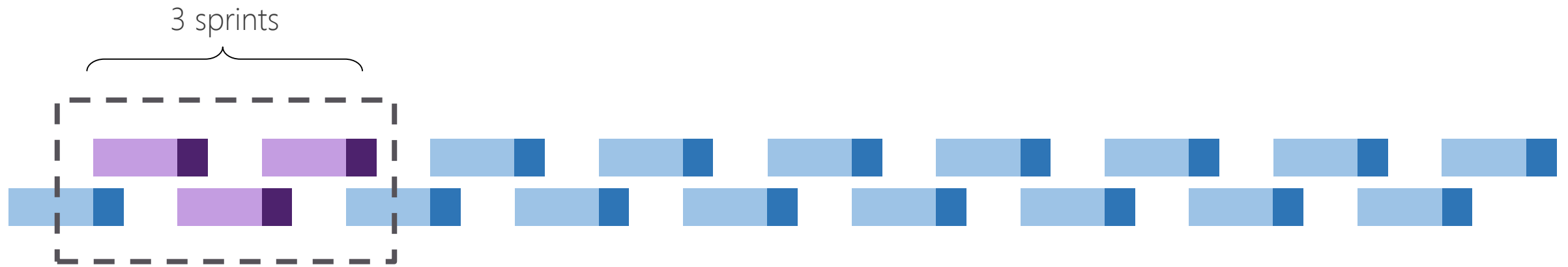


How do you stay in sync?

Question?

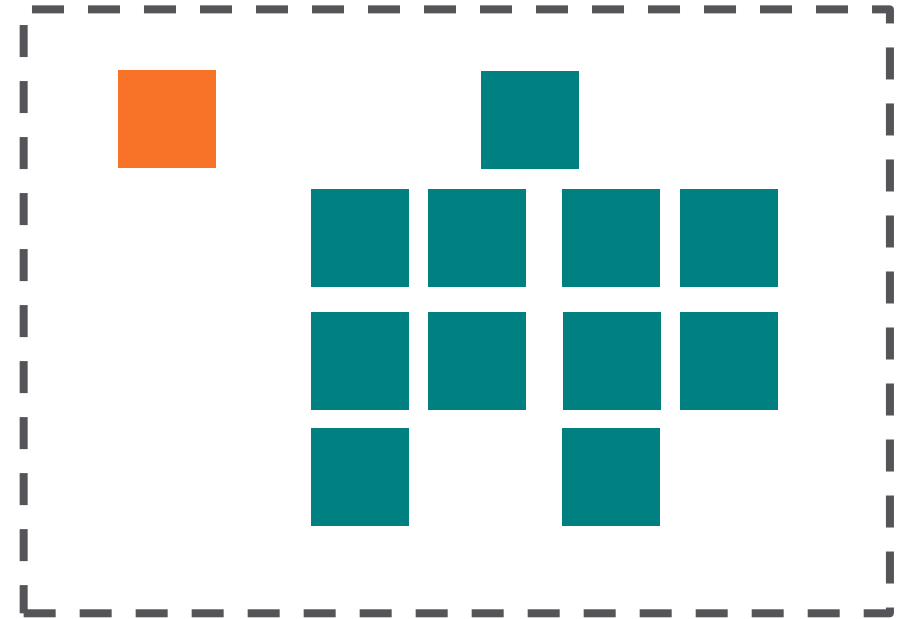


Team Chats

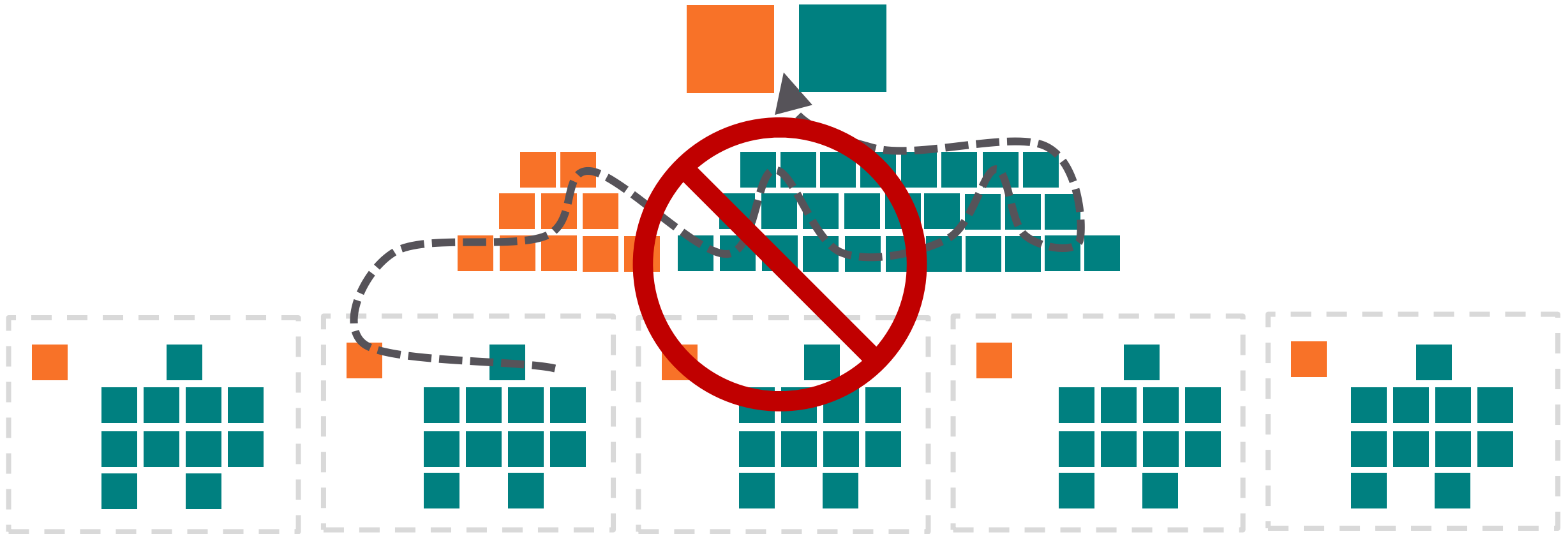


3 Questions

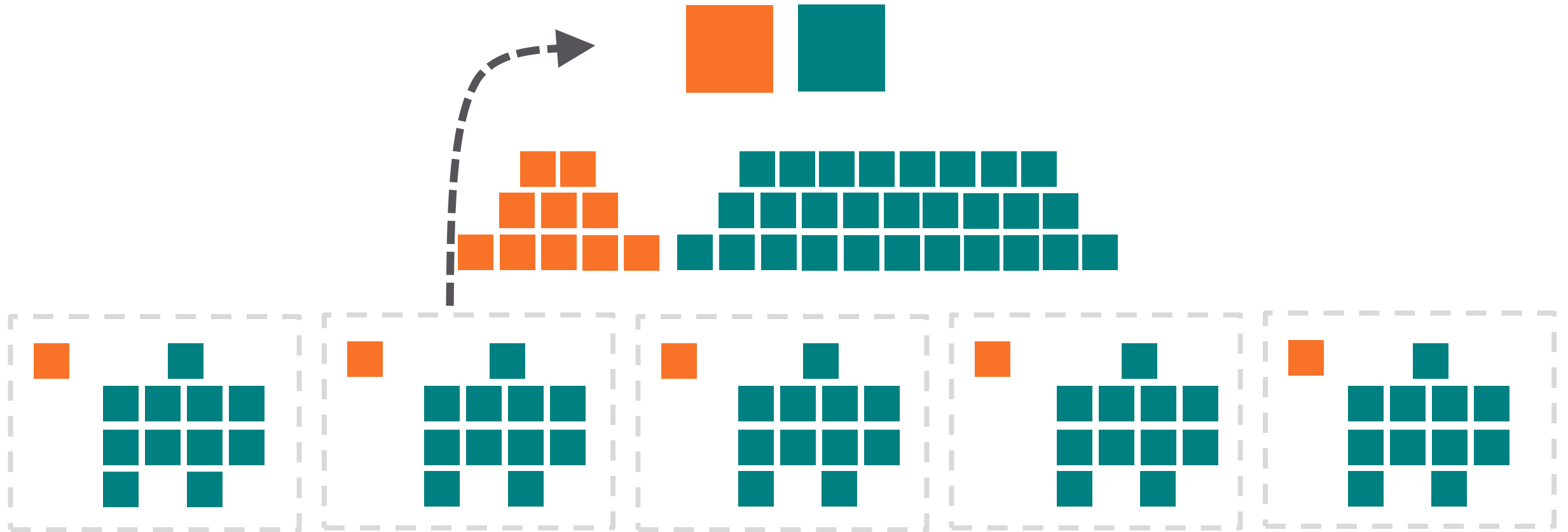
1. What's next on your backlog?
2. What's your debt situation?
3. Any issues?



Direct. No "lost in translation".

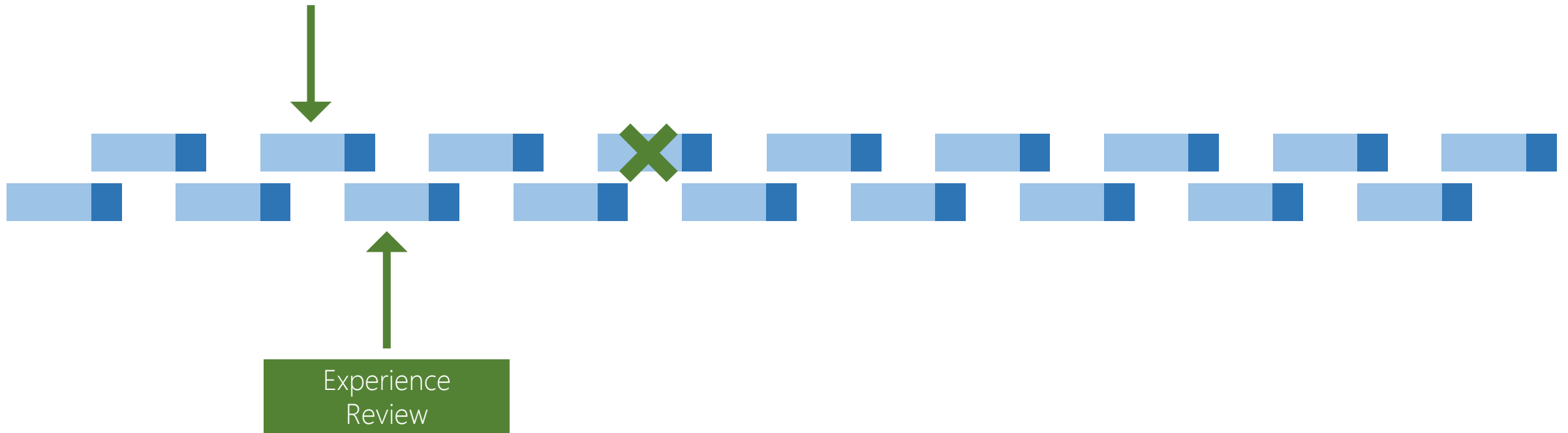


Direct. No "lost in translation".



Q: What about the details?

Question?



Experience Review

- Storyboard of **what** you're going to build
- High level execution **plan**
 - Talk about sprints, not hours
- Feedback, **feedback**, feedback

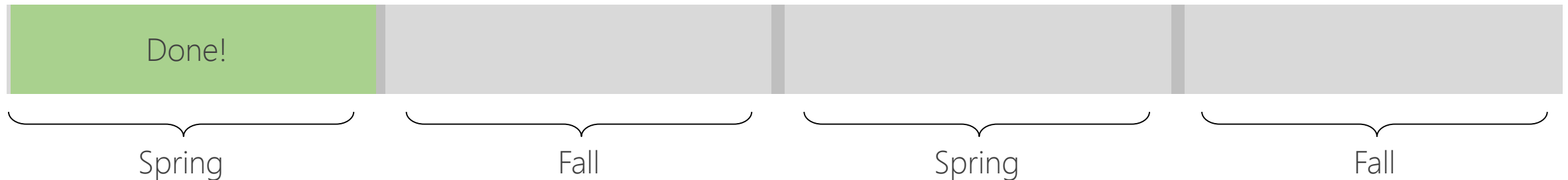
Now what?

What did we learn over the last 6 months?

What did customers tell us?

What did the telemetry tell us?

What changed in the marketplace?



Sprint

3-week sprints

3

Season

6 month season

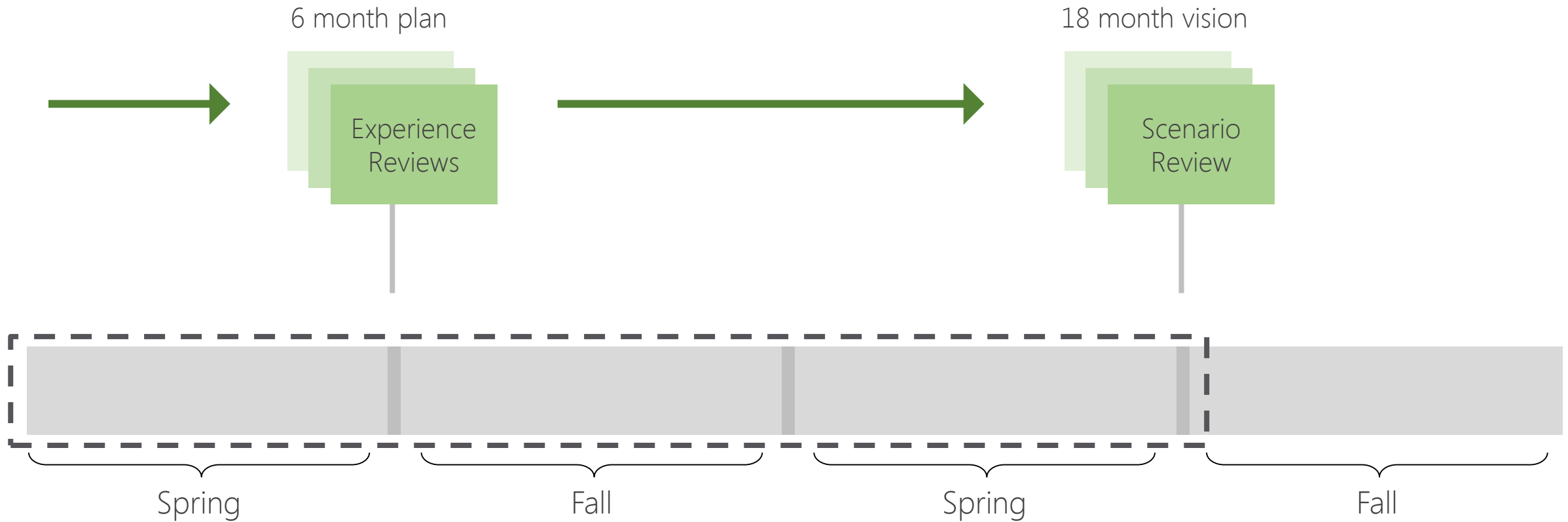
6

Vision

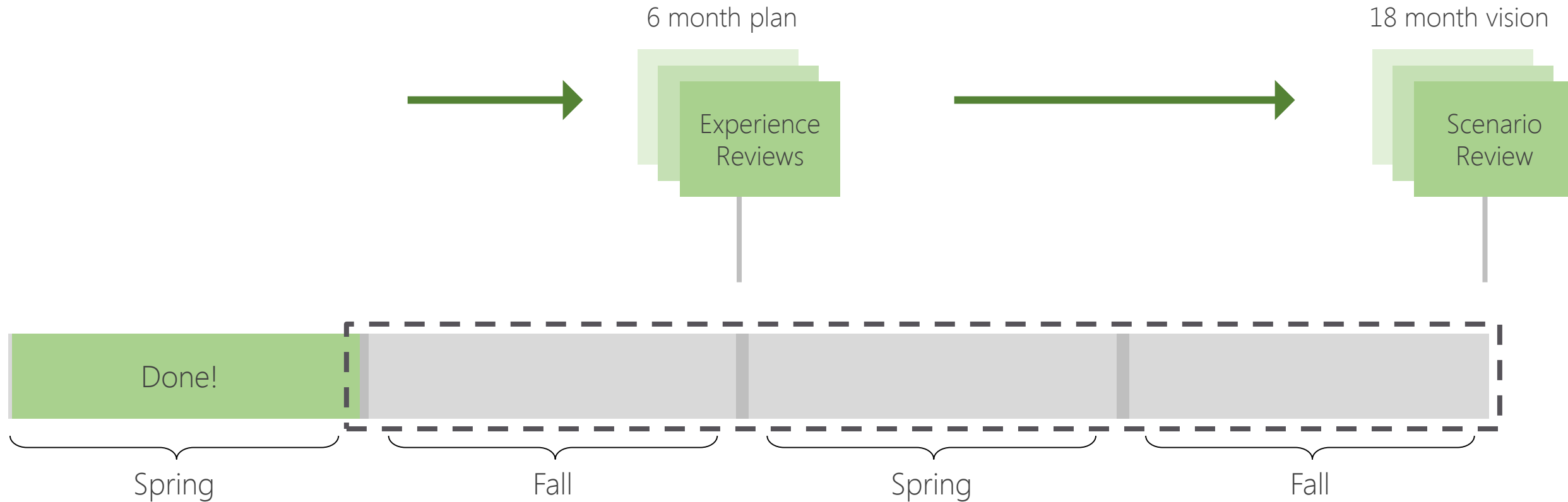
18 month vision

18

Vision



Planning & Learning



Take-a-ways

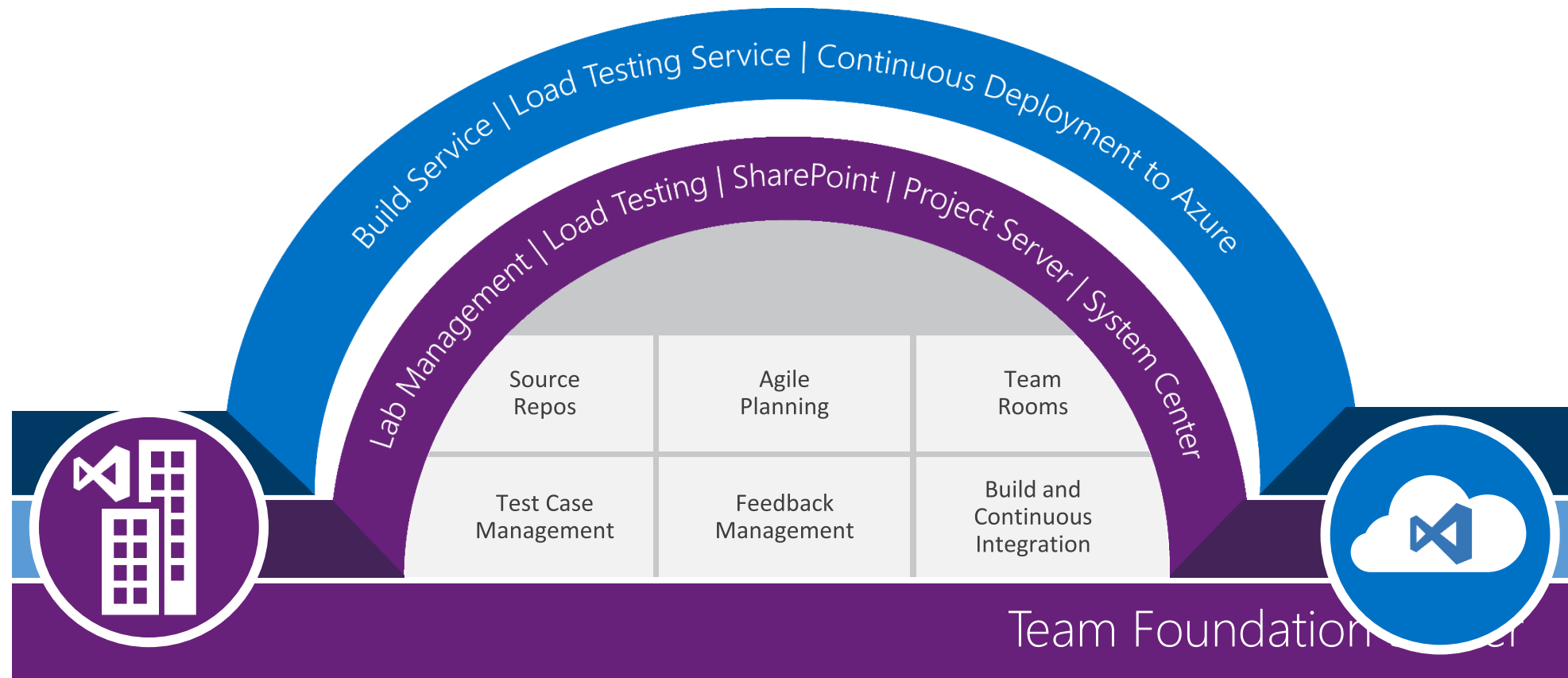
1. Less is more
2. Get out of your teams' way
3. Autonomy, mastery, purpose
4. Plan & learn
5. Have fun

Video : Takeaways

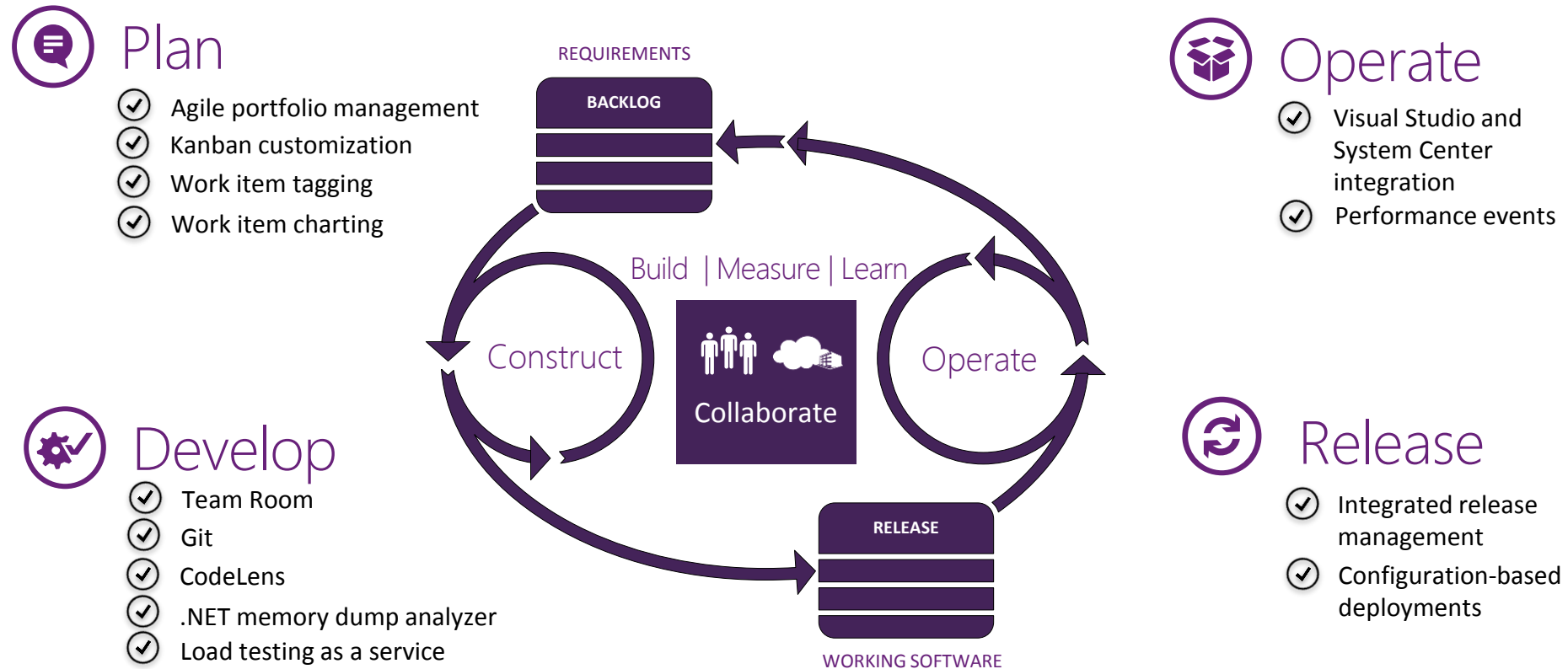
Hear more about our journey...

<http://aka.ms/engineeringstories>

Visual Studio 2013 ALM



Product Features



Web Portal

- Plan, track, and manage work through Web Portal

The screenshot displays the Visual Studio Team Foundation Server 2013 Web Portal interface. The top navigation bar includes 'HOME', 'CODE', 'WORK' (selected), 'BUILD', and 'TEST'. Below this, the 'Backlogs' tab is active, showing a list of backlogs on the left and a detailed view of the 'Contoso Features to Backlog items owned by any team' backlog on the right. The left sidebar shows a tree view with 'Features' and 'Backlog items' under 'Current' and 'Future' categories. The main area shows a table of work items with columns 'Work Item Type' and 'Title'.

Work Item Type	Title
Feature	Agile portfolio management decomposition
Product Backlog It...	Decomposition directly from the backlog
Product Backlog It...	Context menu click targets
Feature	Daily standup
Product Backlog It...	Reporting on the three standup questions

Portfolio Backlog

- Work with a hierarchical portfolio of backlog items by creating features

The screenshot displays the 'Portfolio Backlog' interface in Azure DevOps. The top navigation bar includes 'HOME', 'CODE', 'WORK' (selected), 'BUILD', and 'TEST'. A search bar on the right says 'Search work items'. The left sidebar shows a tree view with 'Backlogs' and 'Queries'. Under 'Backlogs', there are 'Features' (purple icon) and 'Backlog it...' (blue and yellow icons). The 'Features' section is expanded, showing 'Past', 'Current' (selected), and 'Future'. Under 'Current', there are 'Iteration 3' and 'Iteration 4'. The main area shows a backlog titled 'Fabrikam Fiber Team Features to Tasks owned by any team'. It has a 'Backlog' tab and a 'Board' tab. Below the tabs are icons for '+', a list view, 'Create query', 'Column options', and an email icon. The backlog is a table with columns: 'Work Item Type', 'Title', 'State', 'Busin...', 'Target Date', and 'Tags'. The items are organized hierarchically by feature and task.

Work Item Type	Title	State	Busin...	Target Date	Tags
Feature	Location Finder	In Progress			
Product Backlo...	Customer can find the nearest Fabrikam Fiber location.	Done			
Task	Create database for branch office location lookup.	Done			
Task	Design implementation of feature.	Done			
Task	Review design of feature.	Done			
Task	Create UI for feature.	Done			
Product Backlo...	Customer can find the nearest Fabrikam Fiber location.	New			
Task	Create database for branch office location lookup.	To Do			
Task	Design implementation of feature.	To Do			
Task	Review design of feature.	Done			
Task	Create UI for feature.	To Do			
Feature	Television Schedule Lookup	In Progress			
Product Backlo...	Customer can look up television lineup online.	Done			
Task	Create data sync to network schedule provider databases.	Done			

Plan an Iteration

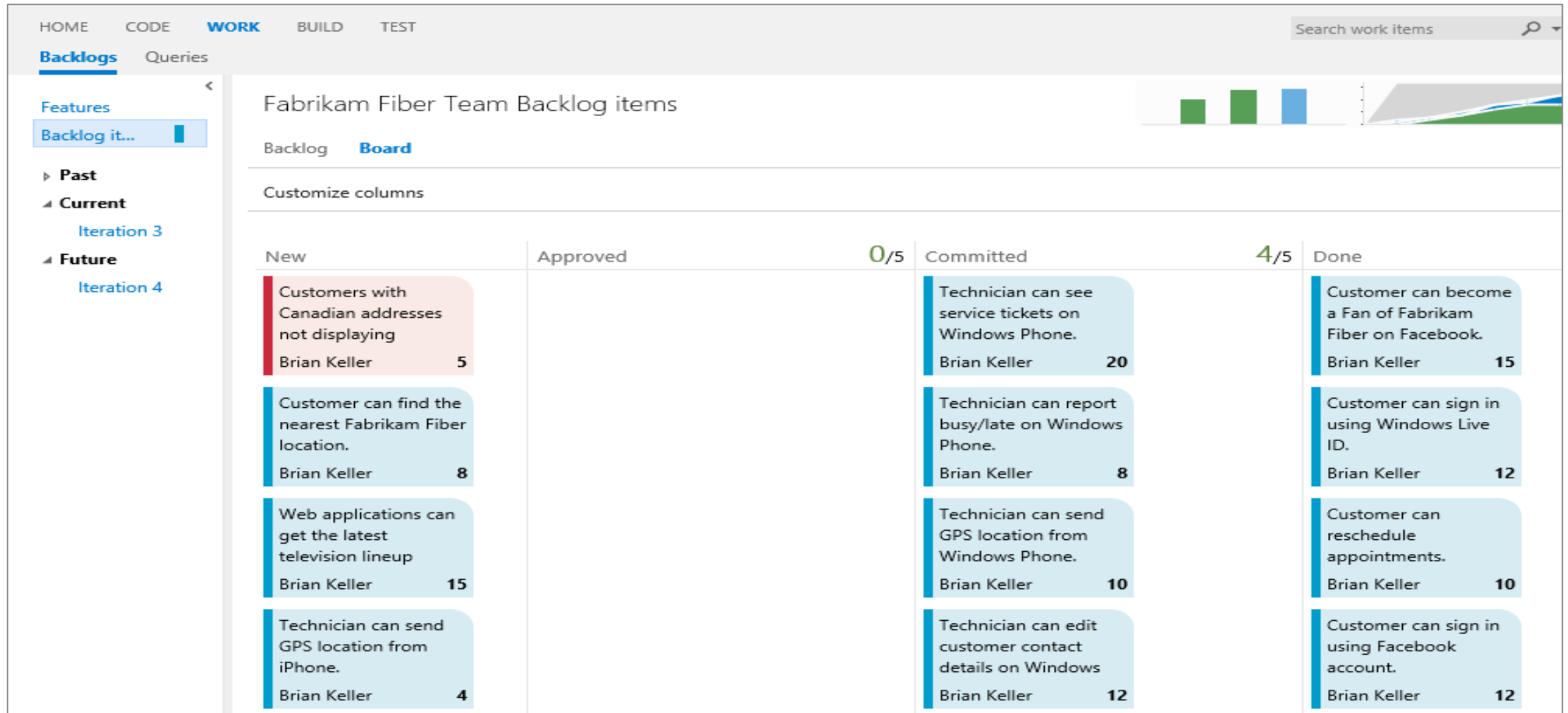
- Use team capacity to determine how much work to plan for the iteration

The screenshot shows the 'Capacity' view for 'Fabrikam Fiber Team Iteration 1' in Azure DevOps. The interface includes a top navigation bar with 'HOME', 'CODE', 'WORK' (selected), 'BUILD', and 'TEST'. Below this is a 'Backlogs' section with a search bar and a list of iterations: 'Past' (Iteration 1, 2), 'Current' (Iteration 3), and 'Future' (Iteration 4). The main area displays the iteration details for 'Iteration 1' (June 3 - June 14, 10 work days) with a capacity bar chart. The 'Capacity' tab is active, showing a table of team members, their capacity per day, activity, and days off. The table data is as follows:

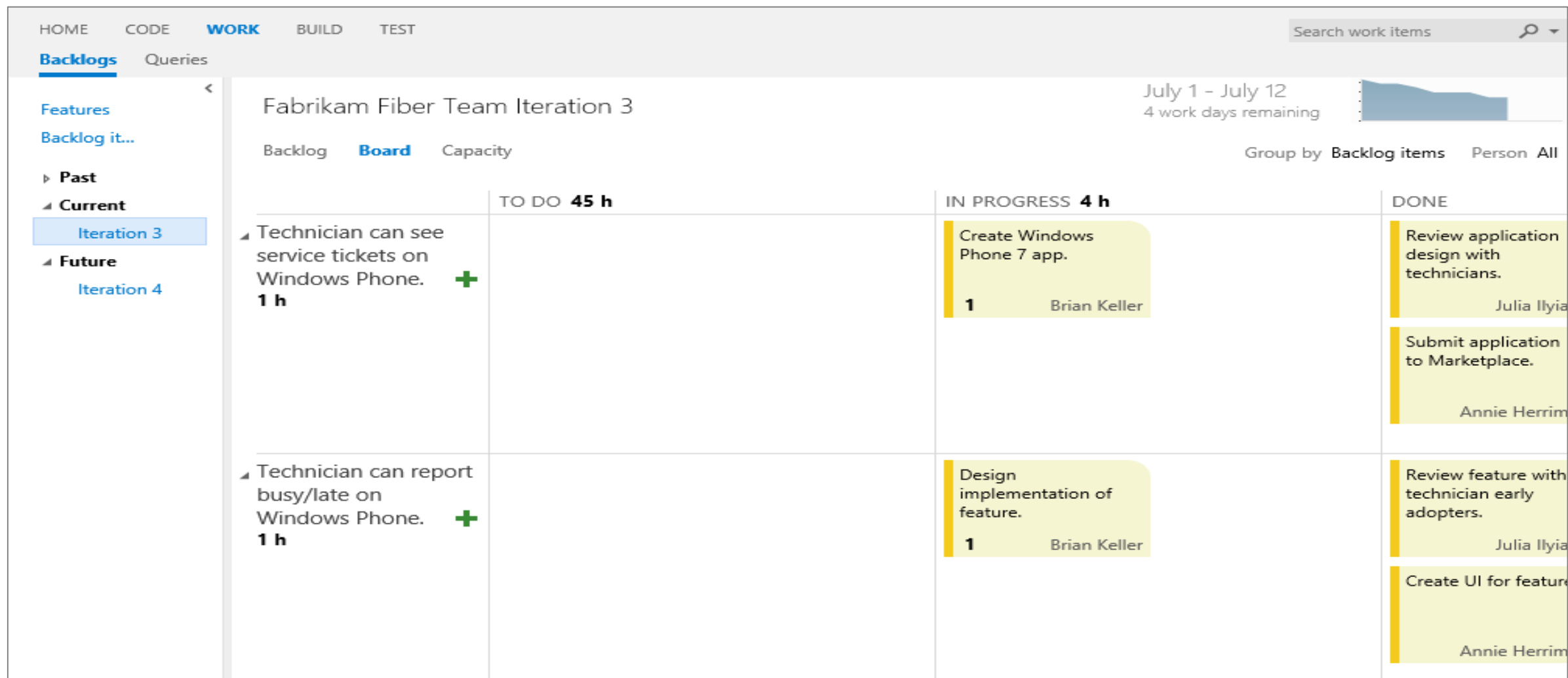
Team Member	Capacity Per Day	Activity	Days Off
Adam Barr	0		0 days +
Annie Herriman	3		0 days +
Brian Harry	5		0 days +
Brian Keller	4		0 days +
Julia Ilyiana	2		0 days +
Team Days Off			0 days +

On the right side, there are dropdown menus for 'Work details' (set to 'On'), 'Work By: Activity', and 'Work By: Assigned To'.

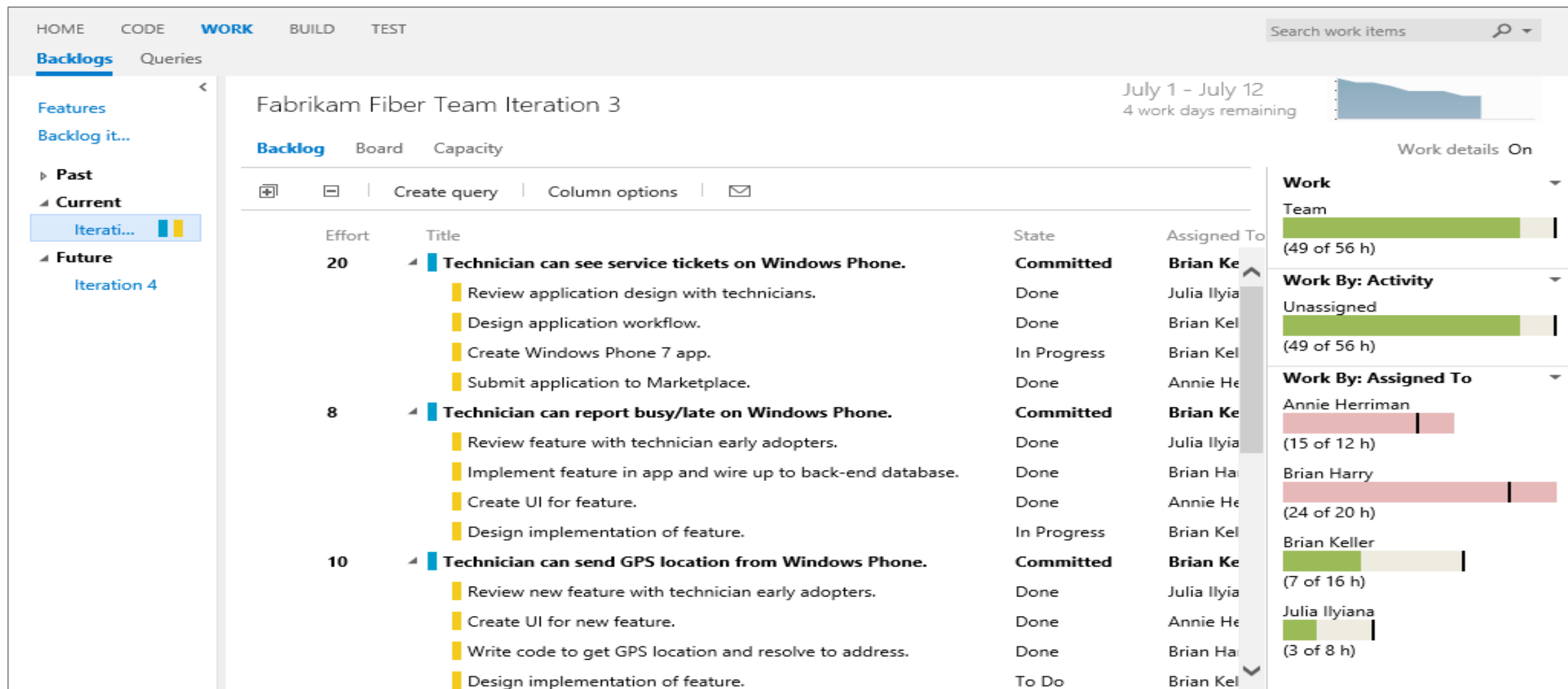
Work on the Kanban Board (continued)



Task Board

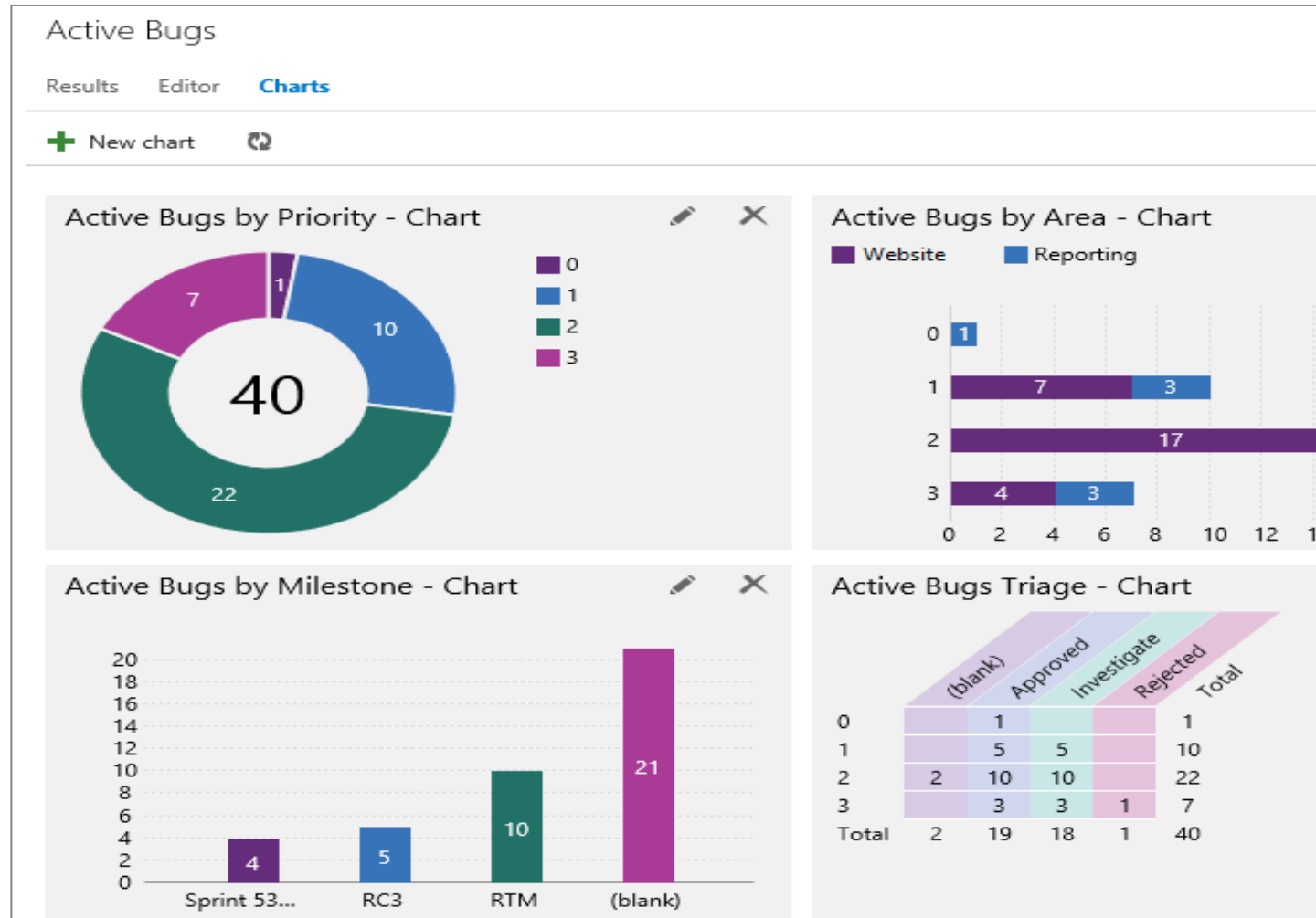


Capacity Bars



Visualize Progress

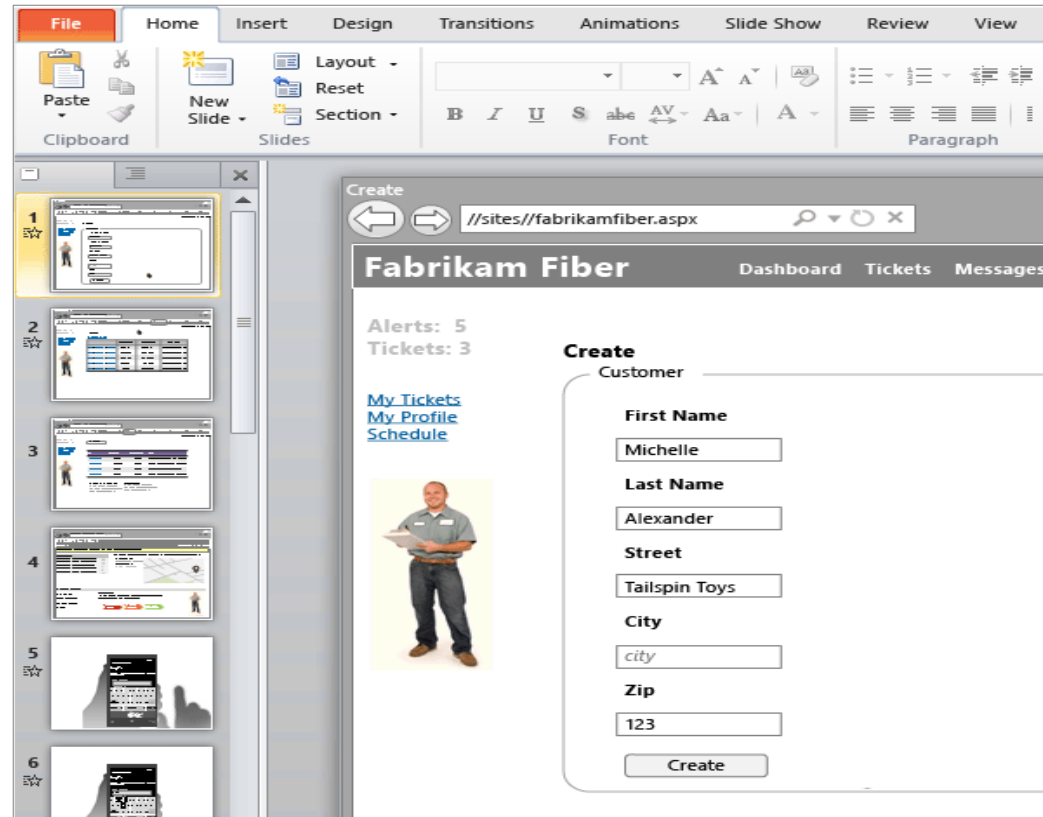
- Work Item Charting



Demo : Plan and Run an Iteration

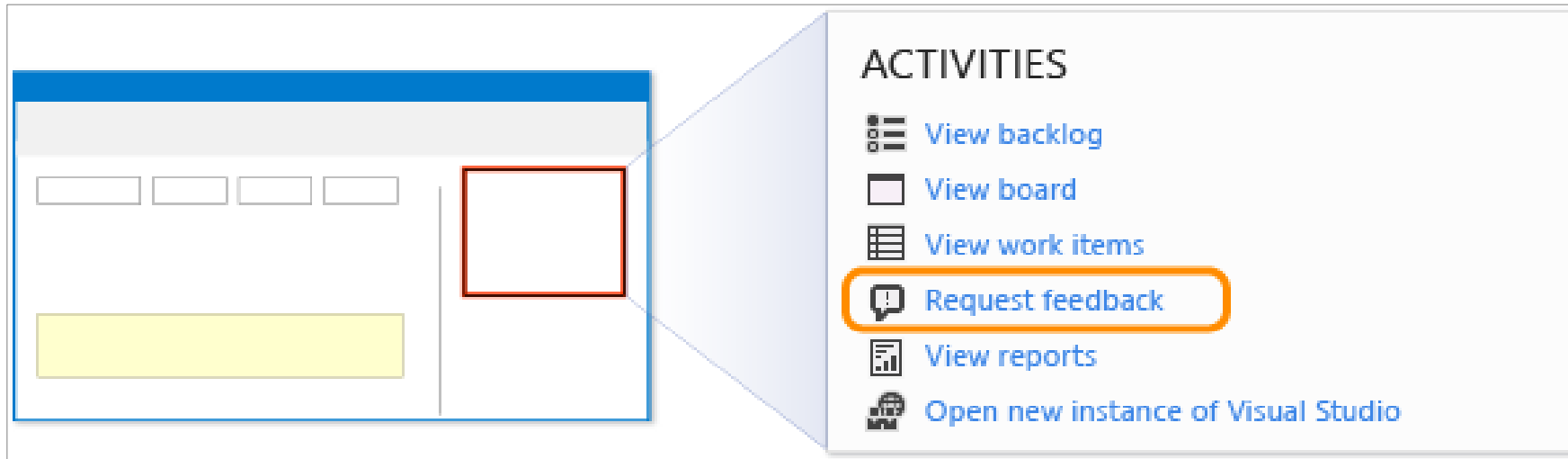
Storyboarding

- Illustrate user stories quickly using PowerPoint Storyboarding




Get Feedback

- Initiate feedback requests and track feedback responses using Request feedback and Microsoft Feedback Client




Team Room


Fabrikam Fiber ← May 03, 2013 → Live




Bug #462 Avatar does not load in home page. 12:09 pm

...Pokrovskaya 


@Jamal Hartnett is this the bug you were talking about? #462? 12:10 pm

Jamal Hartnett 


yes, that's the one - can you take a look at it? 12:10 pm

...Pokrovskaya 


Sure, I'll do that now. 12:10 pm

Jamal Hartnett 

Thanks. 12:10 pm



Changeset 185023 Sprint 47 Update Johnnie McLeod 12:13 pm
2 files edited



AL.Gated 1302.144 failed Build Summary 3:36 pm

Post a message

Thank you!

Murat Odabaşı
muratod@microsoft.com