



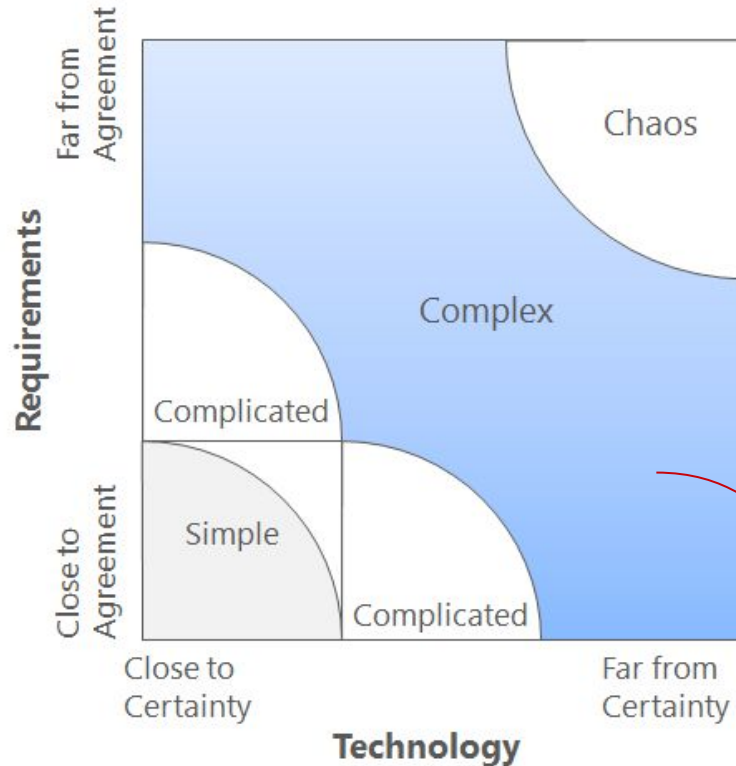
Applying Agile principles and the Scrum framework to drive Learning Design and Technology Projects



Agile is the ability to create and respond to change in order to succeed in an uncertain and turbulent environment.

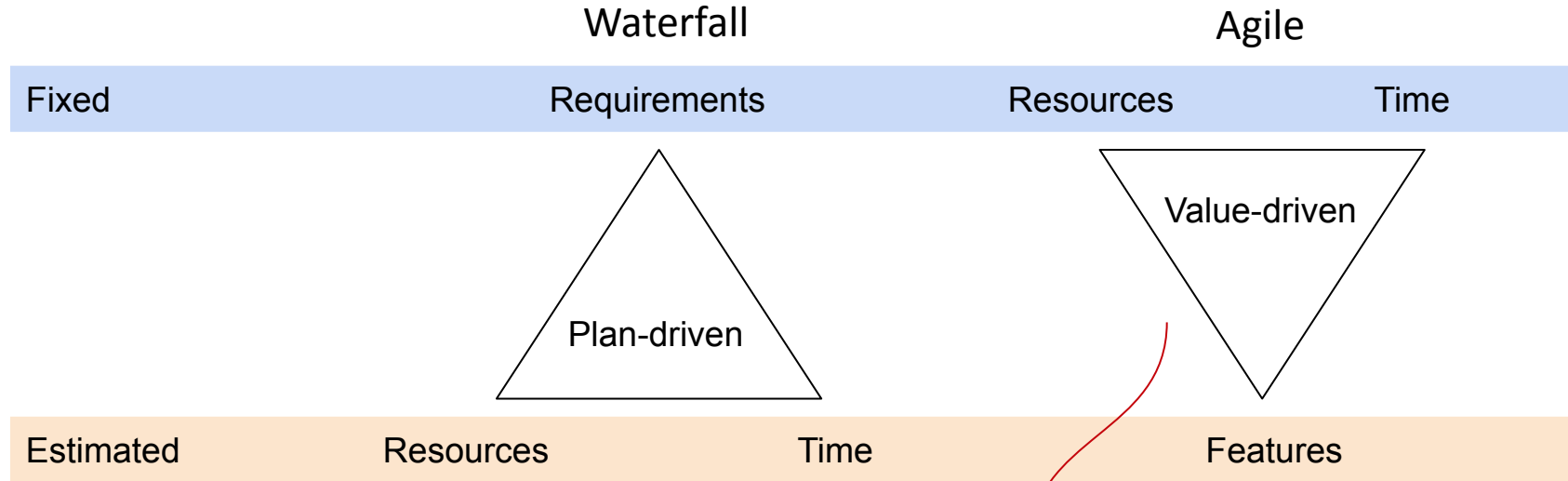
The Agile Alliance

Assess uncertainty using the Stacey complexity model



*use Agile to tackle
complex projects*

Paradigm Shift from Plan-driven to Value-driven development



*Agile inverts
the triangle*

Agile Thinking – 3 Pillars of the Empirical Process

Transparency



Inspection



Adaptation



Agile Thinking - Key Concepts

Timebox

Increment &
Iterate

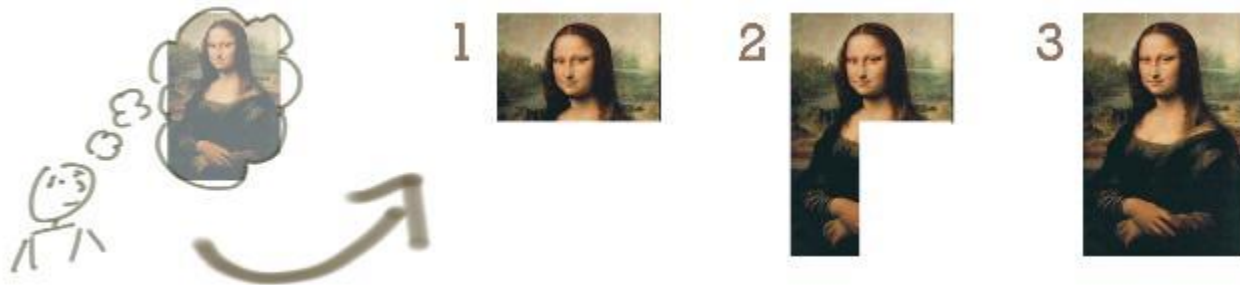
Minimum
Viable
Product

User
Feedback

Timebox



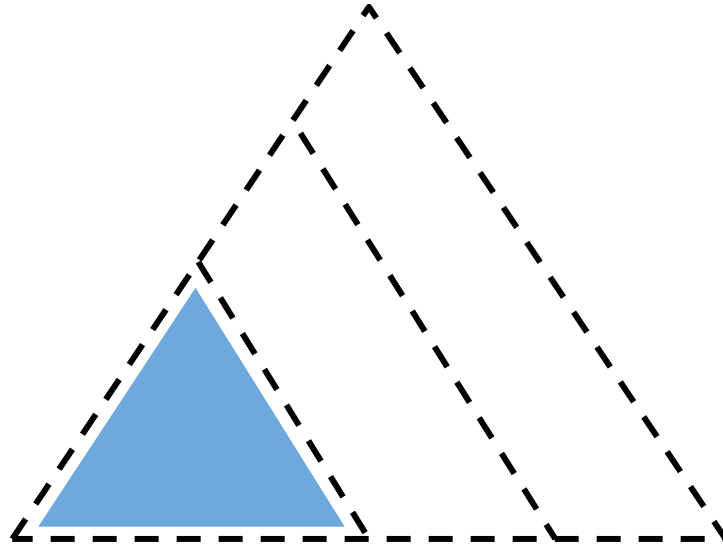
Incrementing



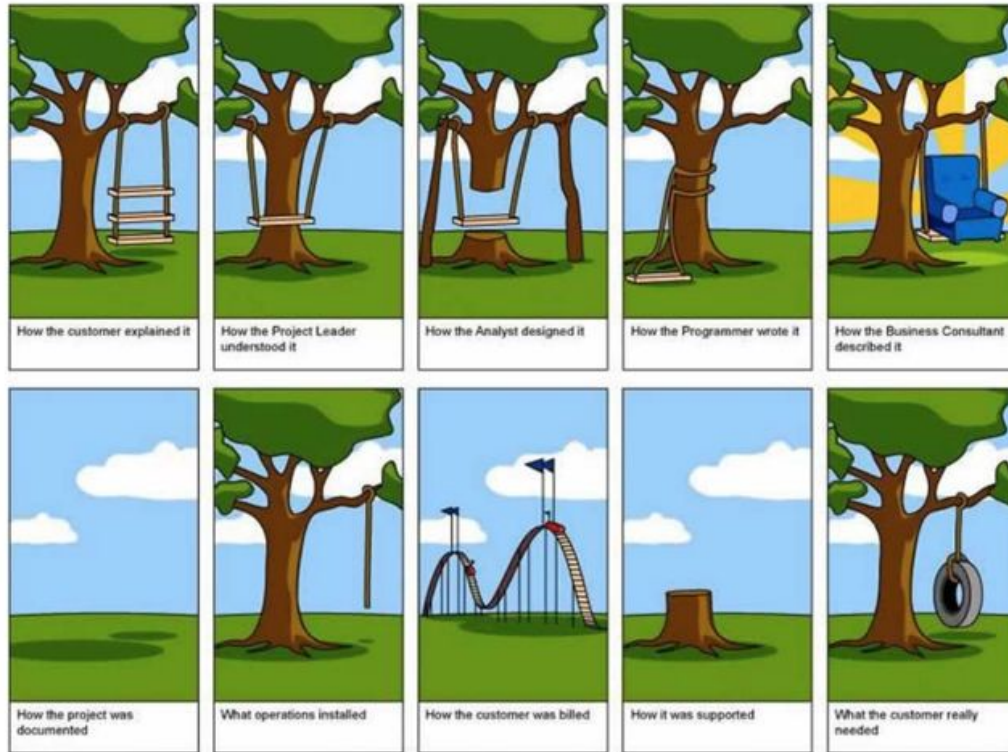
Iterating



Minimum Viable Product (MVP)



User Feedback

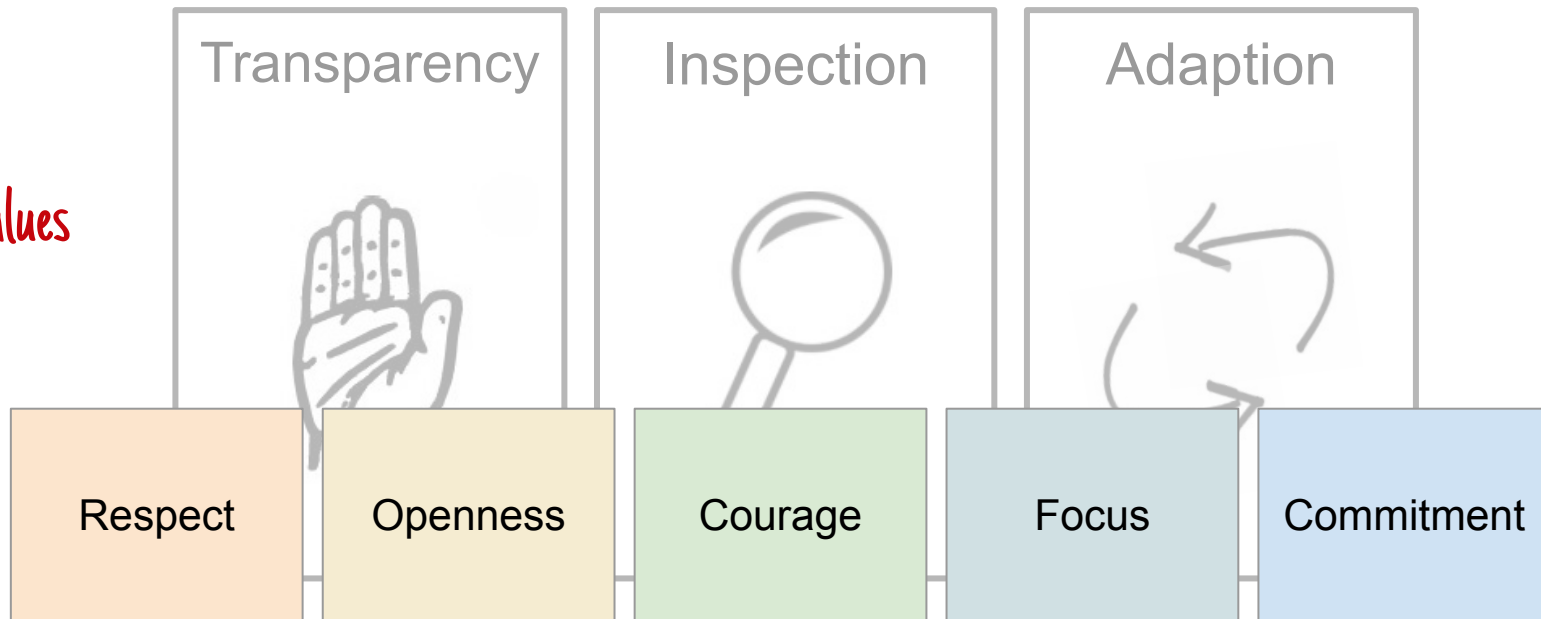


Scrum is an [agile] framework
within which people can address
complex adaptive problems, while
productively and creatively
delivering products of the highest
possible value.

The Scrum Alliance

Agile Thinking – Pillars of the Empirical Process

Scrum Values







Scrum Framework

Roles

Artifacts

Ceremonies

[Watch What is Scrum? Video](#)

Case Study: Background + Context

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Our Impact Upon Working Professionals

27,500+

working professionals who
attended a course
since 2015

234

different courses offered
across 24 topic categories

250+

Professional Certificates
awarded in 2019

36

custom courses provided to
1,000+
individuals in 2019

9,600+

PDHs and CEUs
awarded in 2019



Course attendees represent
all 50 states



Programs ranked in the top
10 every year by US News
and World Report
(ranking began 2012)

850+

Alumni of
Online Master's Degrees



So, why did *we* choose Agile?

Case Study: Getting Started





Scrum Framework

Roles

Artifacts

Ceremonies

[Watch What is Scrum? Video](#)



Scrum Roles

Product Owner

ScrumMaster

Scrum Team



Product Owner

- determines *what* needs to be done
- sets the priorities to deliver the highest value

Scrum Master

- facilitates Scrum process
- serves the Product Owner, Scrum Team and Organization

Scrum Team

- determines *how* work gets done
- self-organizes and self-manages

Organizing our Team

Product Owner

- determines *what* needs to be done
- sets the priorities to deliver the highest value

1 Director

Scrum Master

- facilitates Scrum process
- serves the Product Owner, Scrum Team and Organization

1 Designer

Scrum Team

- determines *how* work gets done
- self-organizes and self-manages

1 Designer
1 Technologist
1 Production Specialist
3 Student Employees

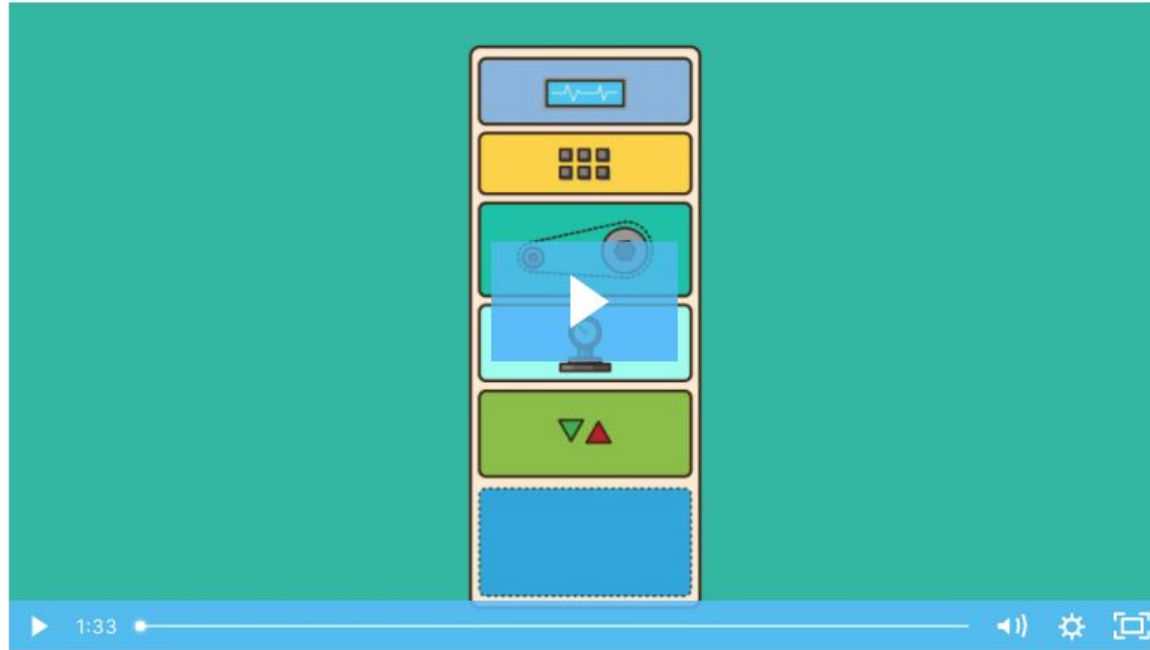


Scrum Artifacts

Product Backlog

Sprint Backlog

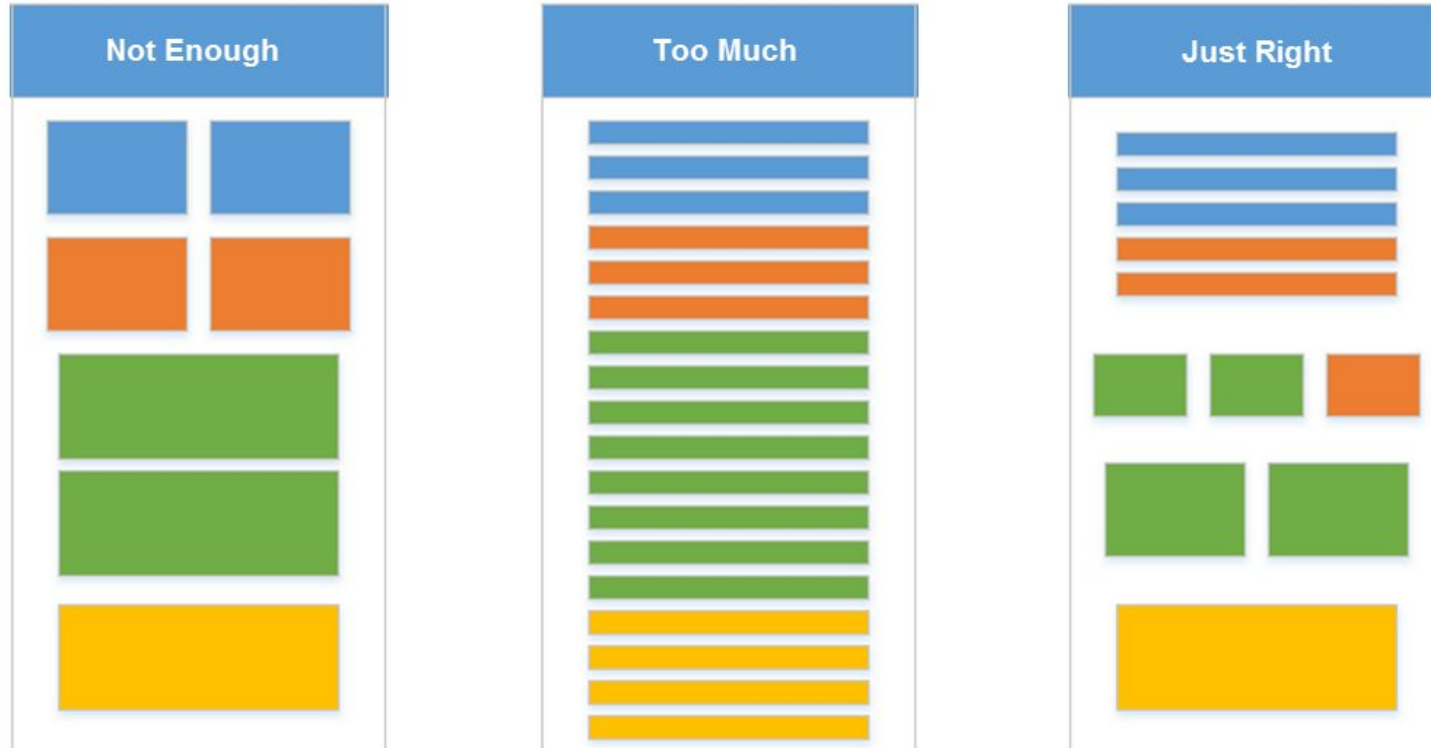
Product Backlog



<https://www.mountaingoatsoftware.com/agile/scrum/scrum-tools/product-backlog>

Backlog Refinement

As work moves up in priority, the more detailed it becomes



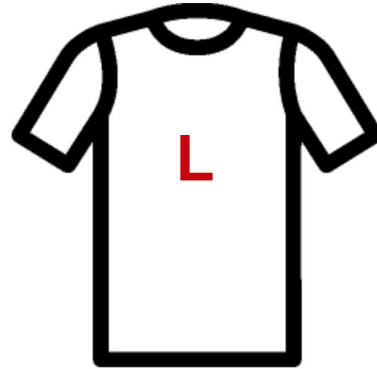
User Story

Writing user stories may be helpful to build the product backlog



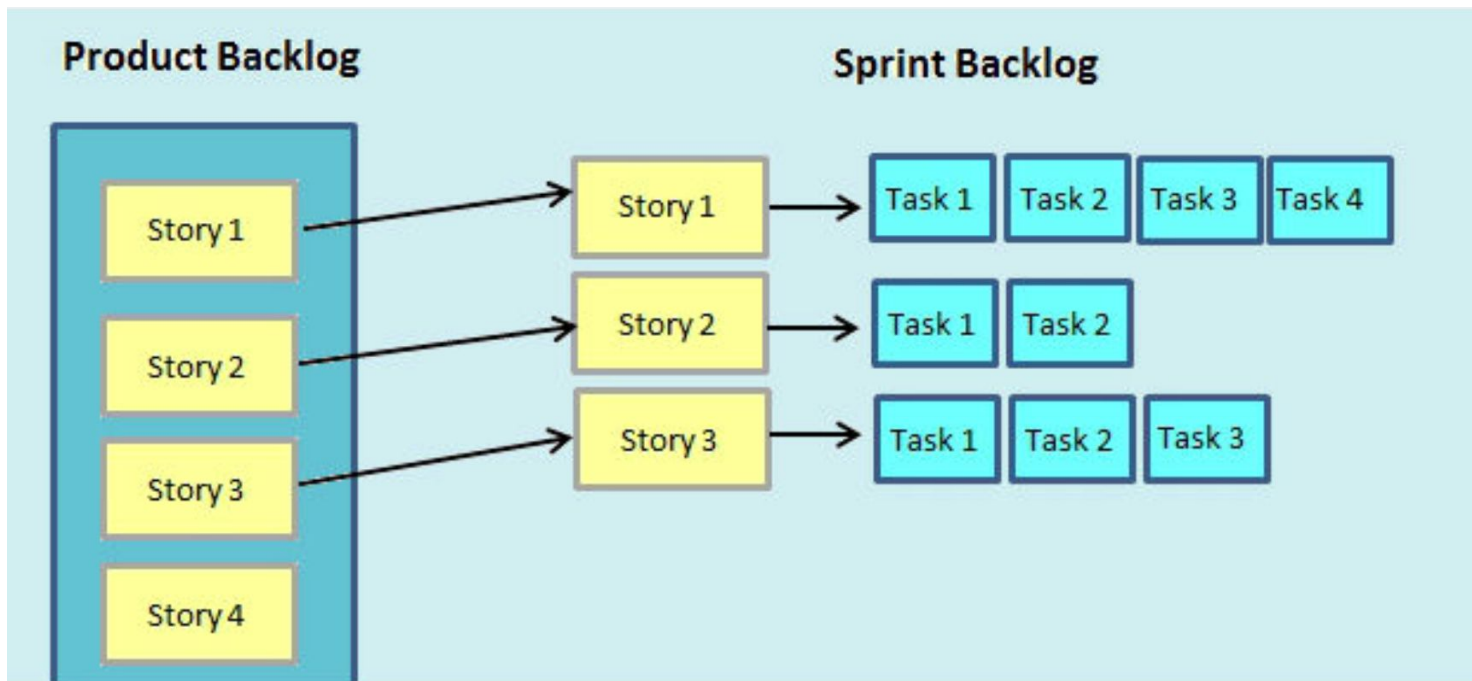
Relative Estimation

How big is the work that we want to do?



Sprint Backlog

What can the team commit to completing this Sprint?





Scrum Ceremonies

Sprint Planning

Daily Scrum

Sprint Review

Sprint Retrospective

Sprint Planning

	10 Mon	11 Tue	12 Wed	13 Thu	14 Fri
9 AM			Sprint Planning	⌚ Daily Scrum	⌚ Daily Scrum
10 AM					
11 AM					

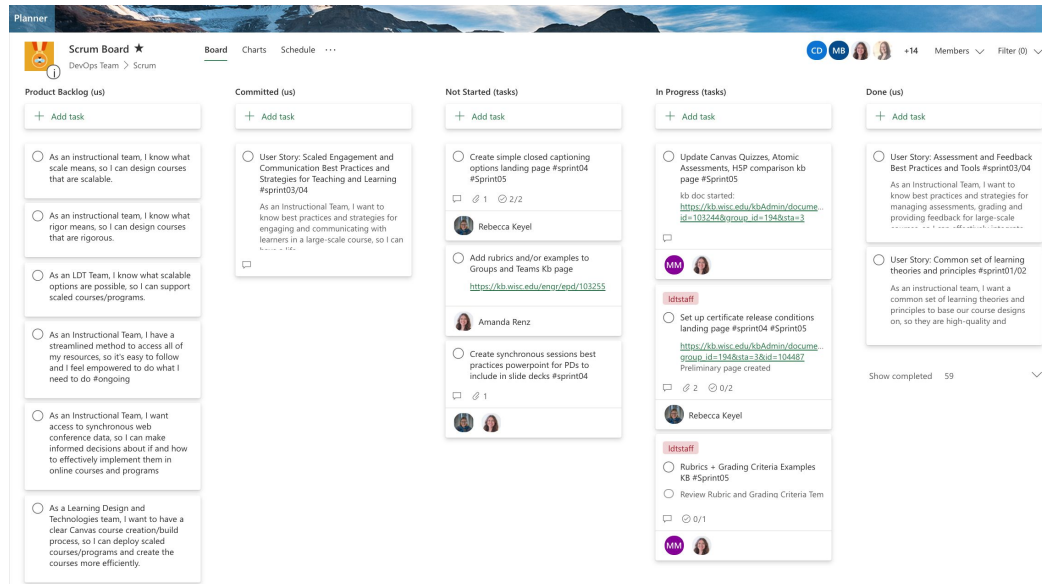
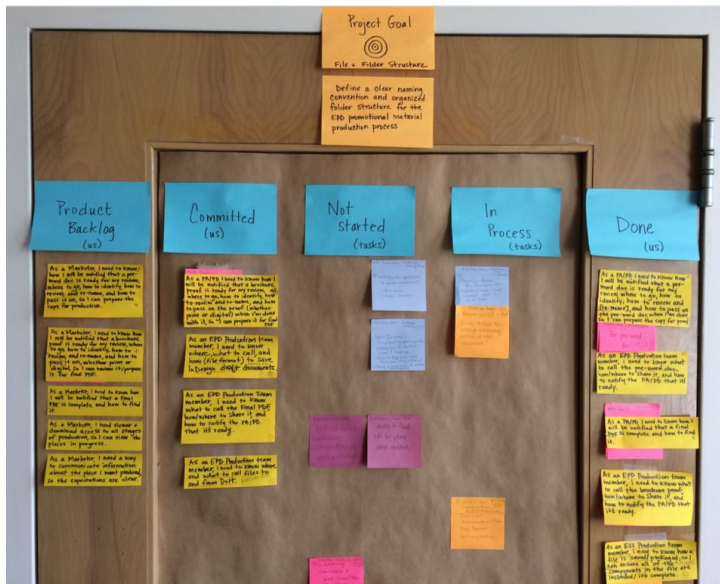
Sprint 1

	17 Mon	18 Tue	19 Wed	20 Thu	21 Fri
9 AM	⌚ Daily Scrum	⌚ Daily Scrum	⌚ Daily Scrum	⌚ Daily Scrum	⌚ Daily Scrum
10 AM				📅 Product Backlog Refinement	
11 AM					

	24 Mon	25 Tue	26 Wed	27 Thu	28 Fri
9 AM	⌚ Daily Scrum	⌚ Daily Scrum	Sprint Planning	⌚ Daily Scrum	⌚ Daily Scrum
10 AM					
11 AM					
12 PM					
1 PM		⌚ Sprint Review			
2 PM		⌚ Sprint Retrospective			
3 PM					

Sprint 2

Sprint Planning





Daily Scrum

Daily 15-minute meeting for the Scrum Team

Scrum Team members answer three questions

Inspect progress toward completing work in the Sprint Backlog



Sprint Review

Ends each Sprint

Scrum Team demonstrates the work that is “Done” for PO and Stakeholders

Collaboration on what to do next



Sprint Retrospective

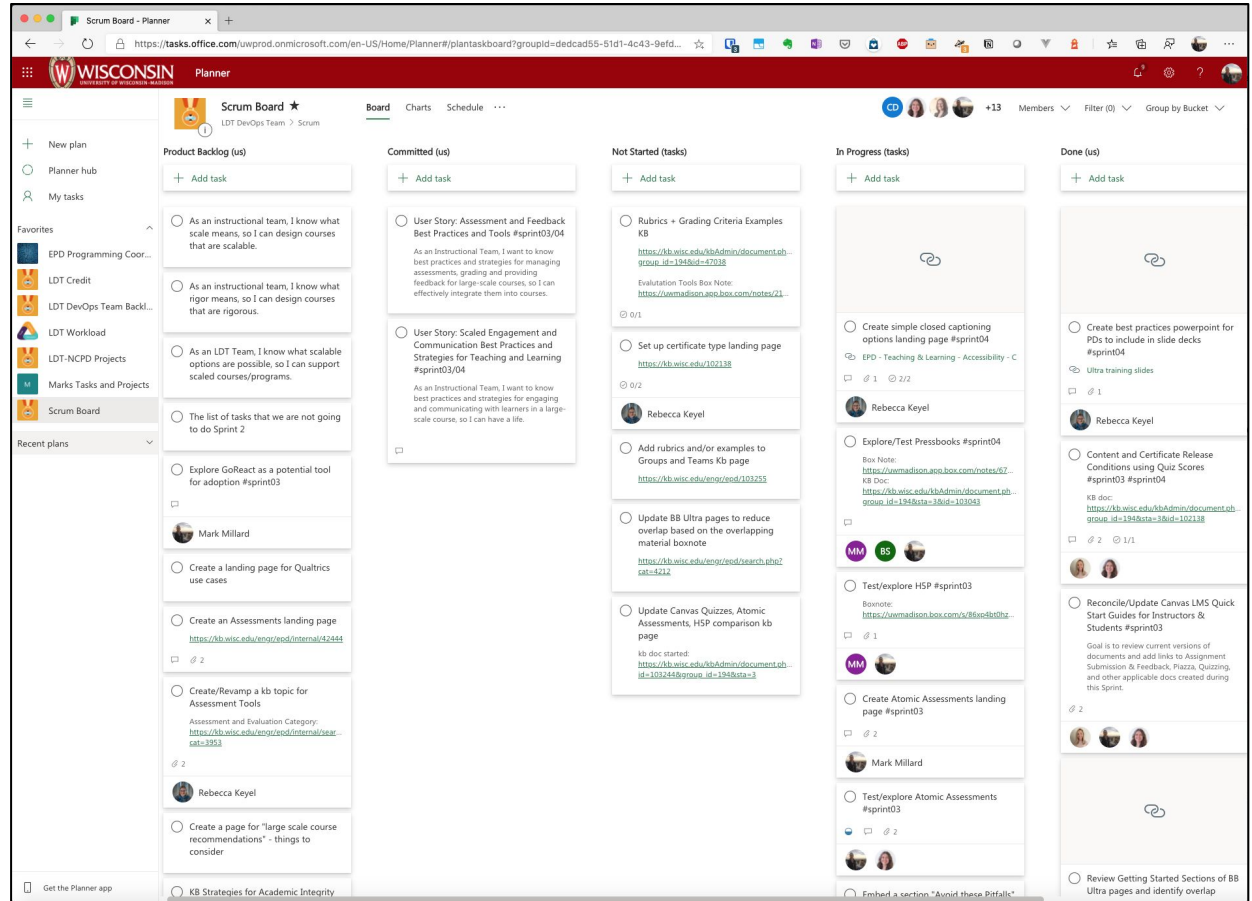
After the Sprint Review

Scrum Team inspects itself; people, relationships, process, tools

Plan improvements

Scrum Ceremonies & Adaptations

- MS Planner
- User Stories → Work Tasks
- Self-organizing
- Highlights Progress & Focus across Team
- 3-week Sprints, with “daily” standups adapted to 3 times/week.



Team Communication & Collaboration

The screenshot displays the Microsoft Teams application window. The title bar at the top reads 'Development (Northwind Traders) | Microsoft Teams'. The interface is divided into three main sections: a left-hand navigation pane, a central chat area, and a right-hand sidebar.

Left-hand navigation pane: This pane contains a search bar at the top. Below it, the 'Favorites' section lists several channels: 'Northwind Traders' (with a sub-channel 'General'), 'Customer Accounts', 'Development' (highlighted in blue), 'Marketing', 'Social Media' (with a red notification badge), and 'Website'. A link to '32 more channels' is also present. Below the favorites, there are sections for 'Designers' (with a sub-channel 'General'), 'Fourth Coffee' (with a sub-channel 'General'), 'Fun stuff', and 'Marketing' (with a sub-channel 'Weekly Specials'). A link to '4 more channels' is at the bottom of this section. At the very bottom of the left pane are icons for 'Feedback' and 'Settings', and a button that says 'Create a team'.

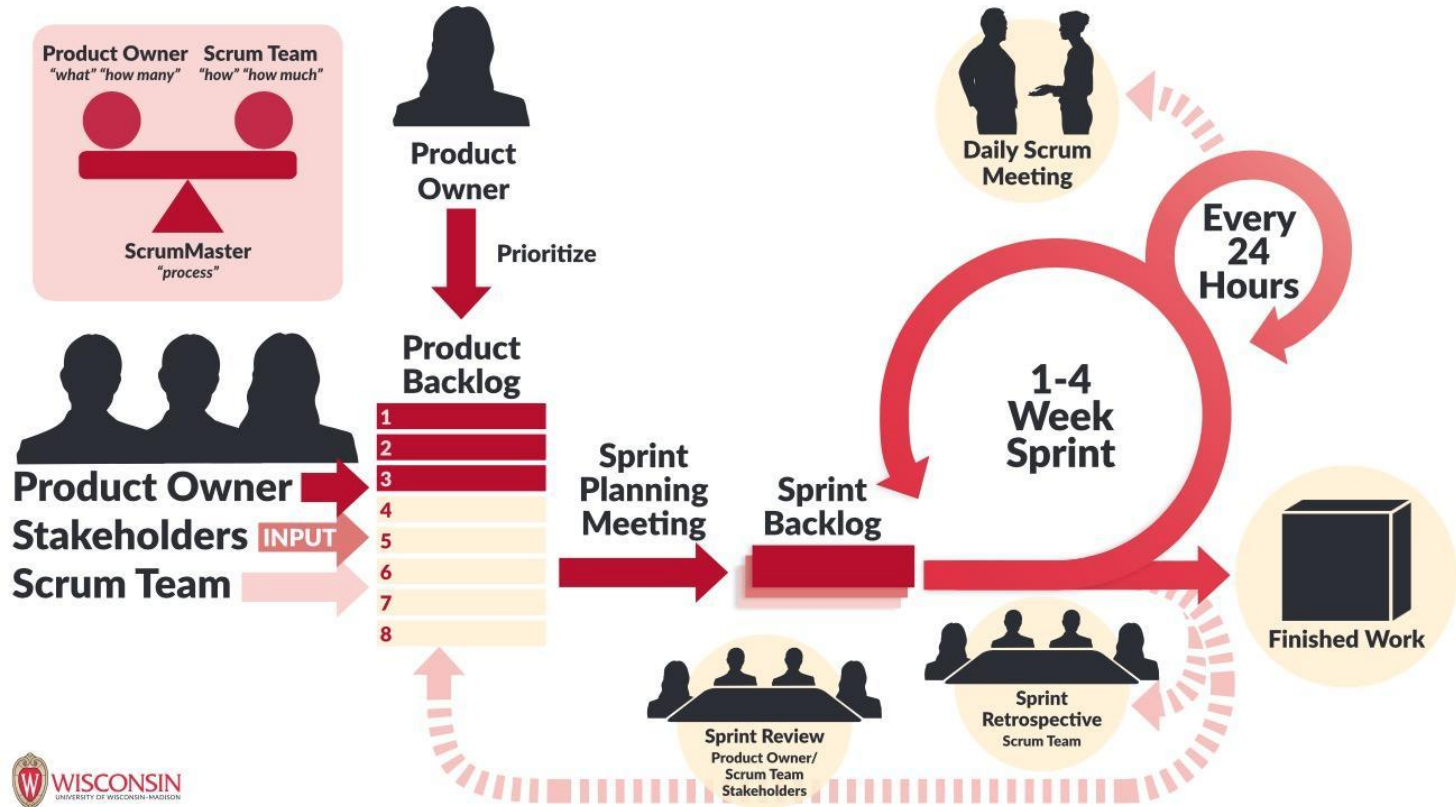
Central chat area: This area shows the conversation for the 'Development' team. At the top, it says 'Northwind Traders > Development' with a star icon and a menu icon. Below this are tabs for 'Conversation', 'Files', 'Notes', and 'Team Services'. The chat history shows several messages:

- A message from Cecily De Crum at 11:00 am sharing a link to 'http://www.contoso.com/3054433/the-most-important-tech-jobs-of-the-future'. The message includes a preview of an article titled 'The Most Important Tech Jobs Of The Future' with a description: 'For engineers, there is a lot of opportunity to look forward to in the coming years. New advances in technology mean more jobs and...'. The preview also shows the 'Contoso.com' logo.
- A reply from Kadji Bell at 11:02 am saying 'I love this article! We've got a bright future'.
- A message from Daphne Knowles at 11:05 am asking 'Any update on the bug #456892 that I filed yesterday? I would love to get that resolved before the next update.'.
- A reply from Miguel Silva at 11:16 am saying 'I don't know what is causing this just yet. I saw some abnormalities in the logs and and tried a few solutions that didn't work. I'm going to chat with Jakob to see what other information we can get.'.
- An 'IMPORTANT' message from Babek Shammass at 11:24 am saying 'Just sending some kudos to the team! The leadership team reviewed the latest build yesterday and they were really pleased with the progress. Only a few more weeks until release so let's stay focused on delivering a high quality app. Great job all!'.
- A reply from Daniela Mander at 11:26 am saying 'Babek, thanks for passing along the good news! Just wait until they see the next update.'.

Right-hand sidebar: This sidebar shows the 'Conversation' tab selected. It displays the chat history with timestamps for each message: 11:00 am, 11:02 am, 11:05 am, 11:16 am, 11:24 am, and 11:26 am.

Bottom bar: The bottom of the chat area features a 'Start a new conversation' button with a plus icon, and icons for emojis, attachments, and video calls.

Scrum Framework



Our Experience

Scaled design for
high-enrollment
courses

Integration of other education
support teams into LDT
workflows and reorganization

?

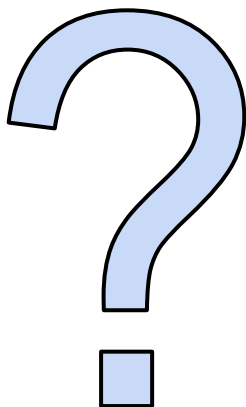
Scaled service and support
to serve mass transition to
online course delivery

Closing Thought

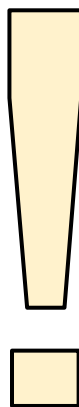
Agile is not a destination. You don't arrive at agile and then stop. Agile is about continuously improving. No matter how great your team is, if your team isn't better than it was a year ago, your team is no longer agile.

Mike Cohn, Mountain Goat Software

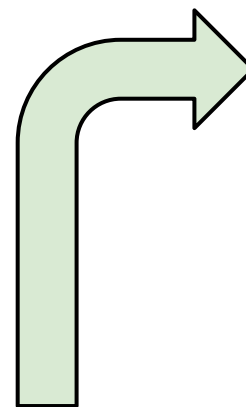
Your thoughts?



What are you
wondering
about?



What are
you **excited**
about?



What
next step
might you
take?

References

Scrum Guide: <http://www.scrumguides.org/scrum-guide.html>

Scrum Alliance: <https://www.scrumalliance.org/>

Agile Alliance: <https://www.agilealliance.org/>

Our Resources: <https://kb.wisc.edu/engr/epd/page.php?id=104337>



Thank you!