Scrum Process Framework

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Agenda

1. Waterfall model.
1. What’s/Why Agile?
2. Agile Manifesto/ Principles of Agile.
3. What’s/Why Scrum?
4. Scrum overview/ events and estimation.
5. Tools.
6. References.

Game

Row vs Column at a time!!
a to j
1 to 10
i to x

Alphabet Letters	Numbers	Roman Numerals

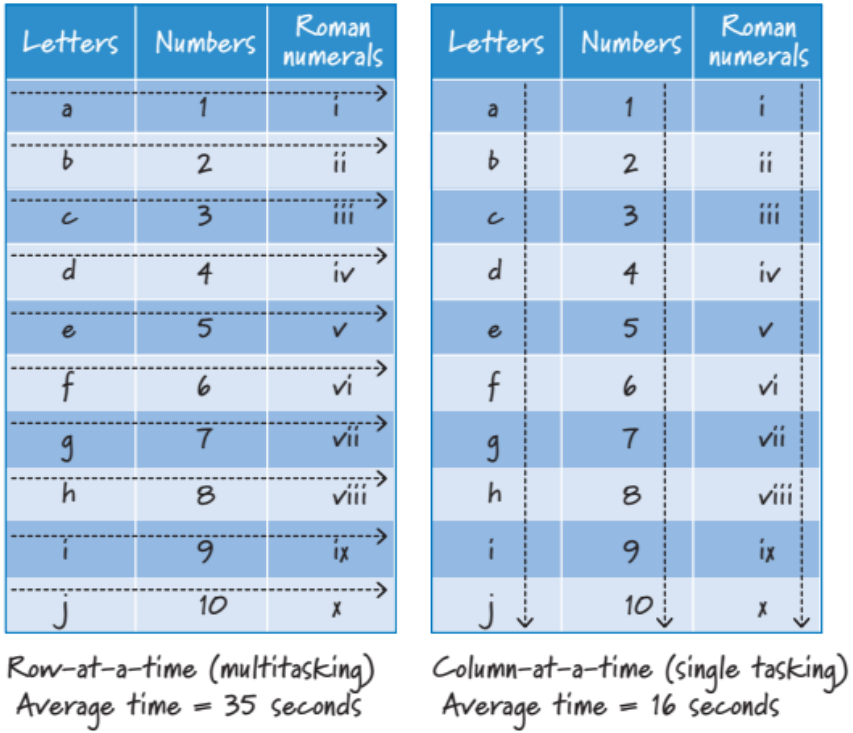
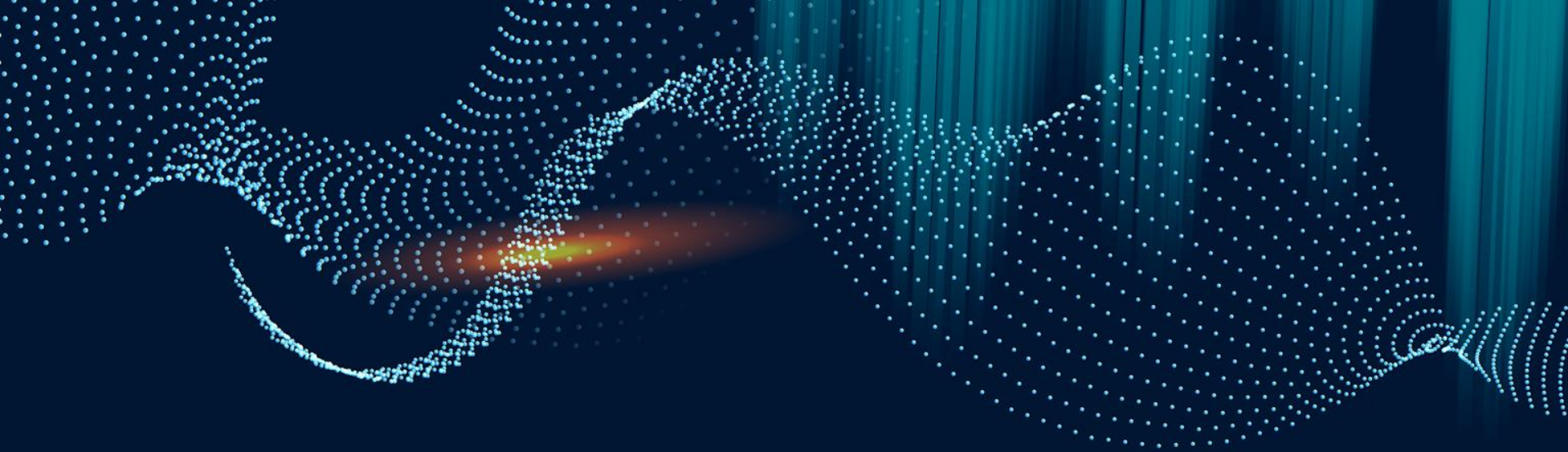


FIGURE 20.3 Cost of multitasking

Which approach do you prefer?

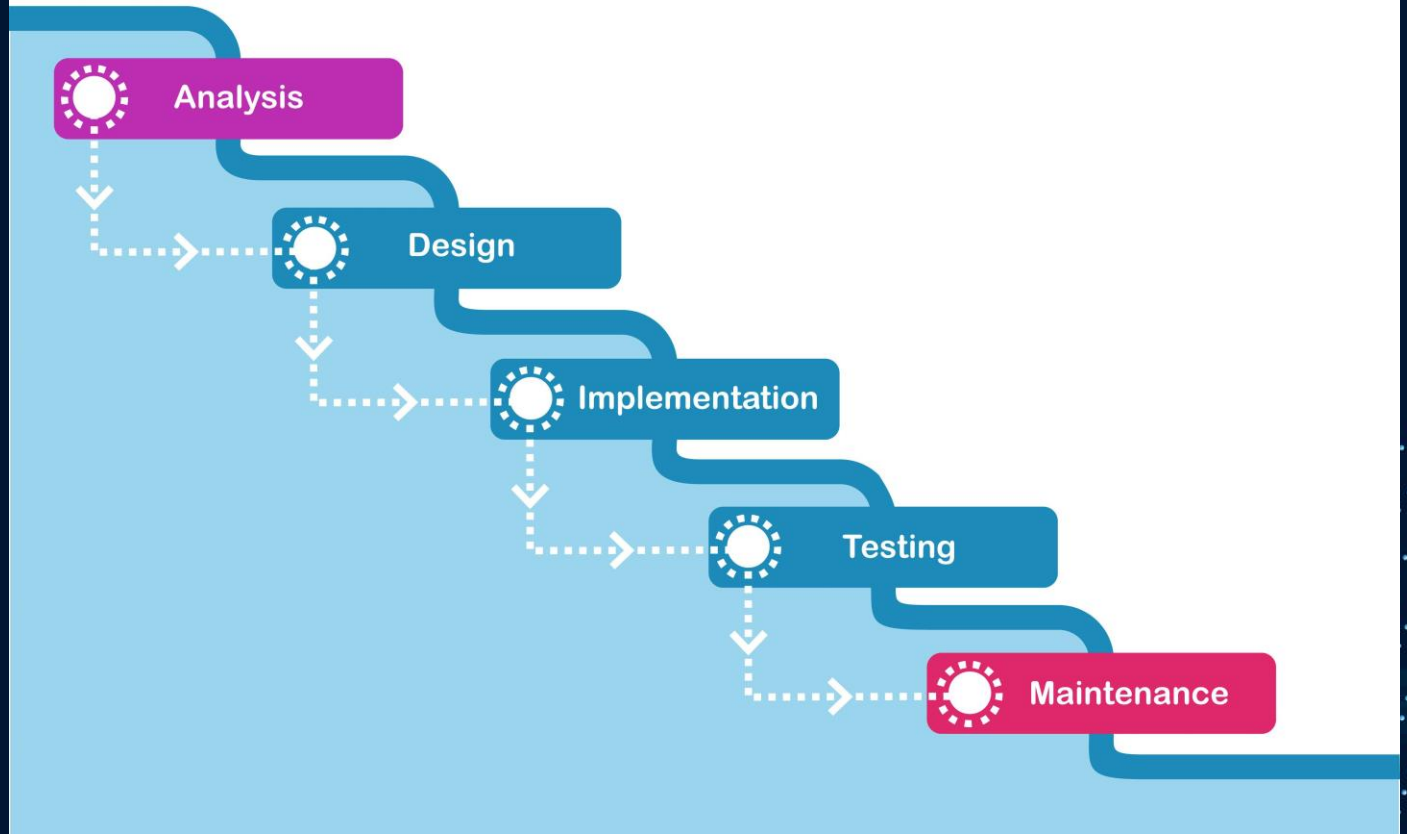
Rows (No wip / multitasking) vs .columns (WIP =1 / Focus on 1 project at a time)

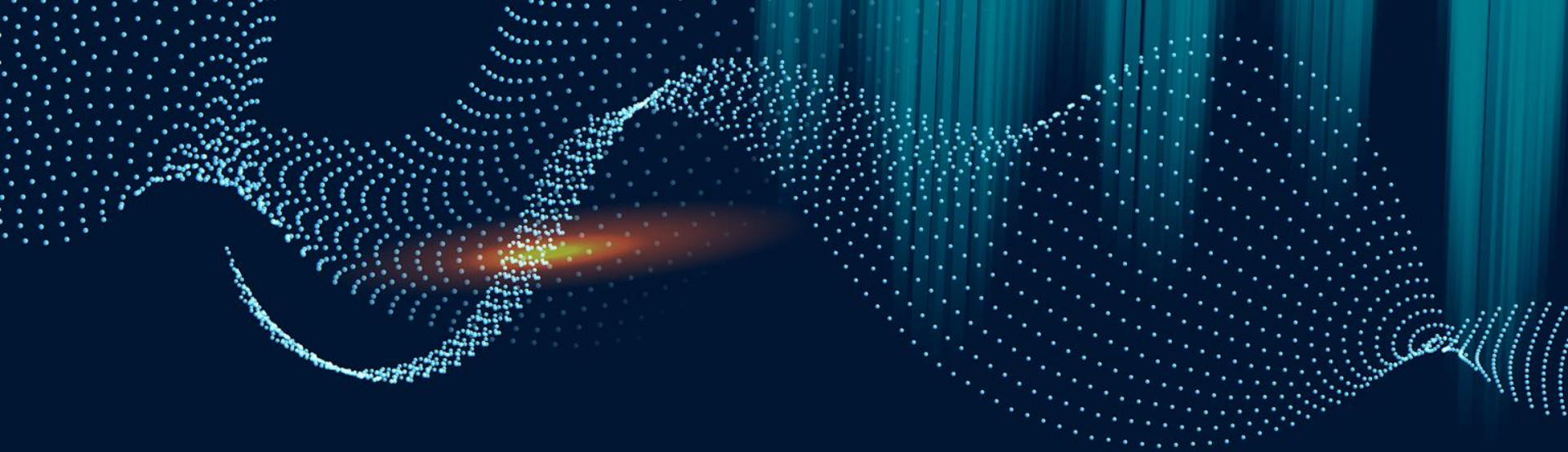
- which one was faster ?
- with which one were you more focused?
- which one gives you more satisfaction?
- which one was more stressful?
- which one is more error occurrence?
- which one is more complex to work?



01 SDLC/Stakeholders

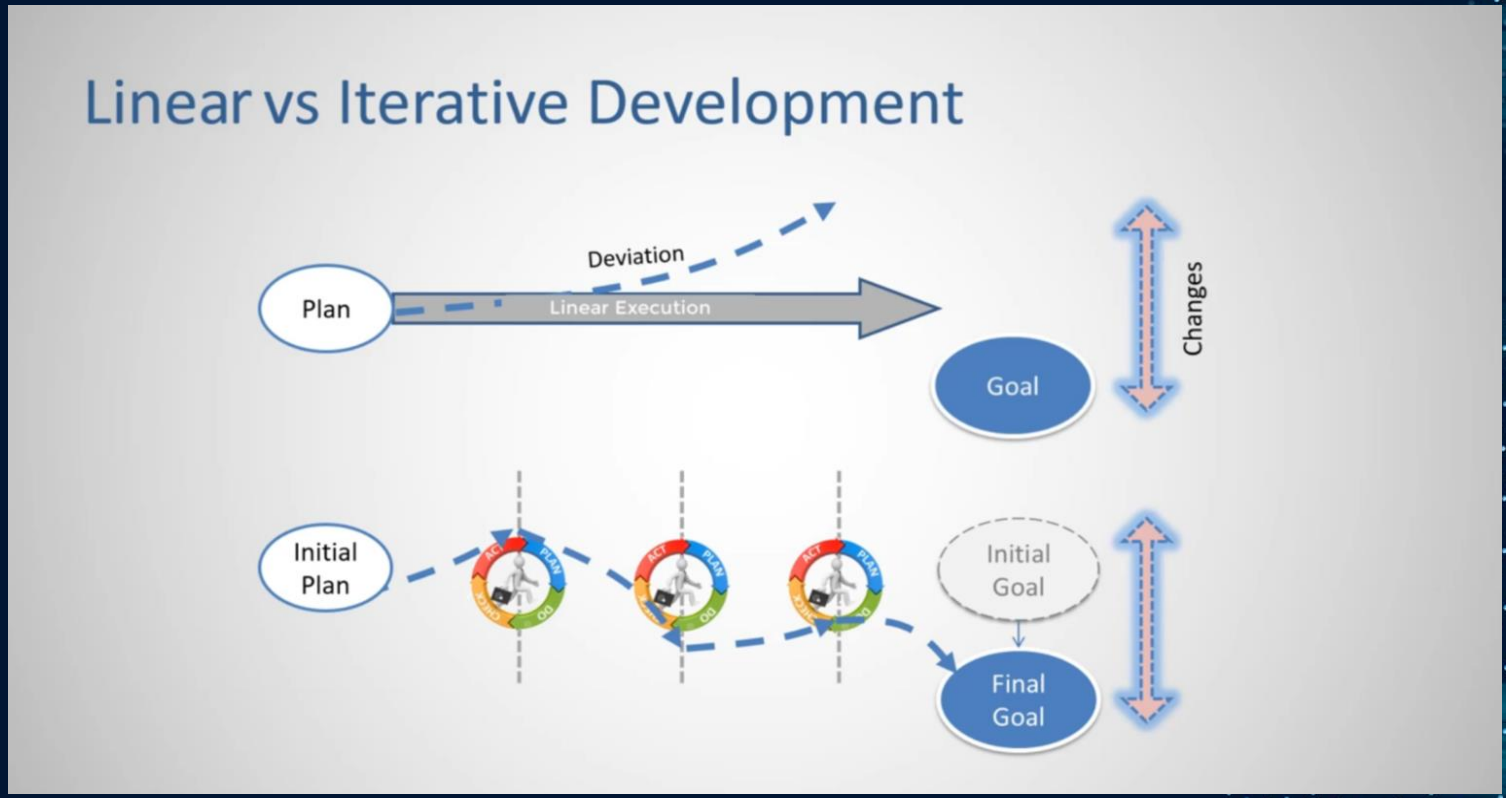
WATERFALL



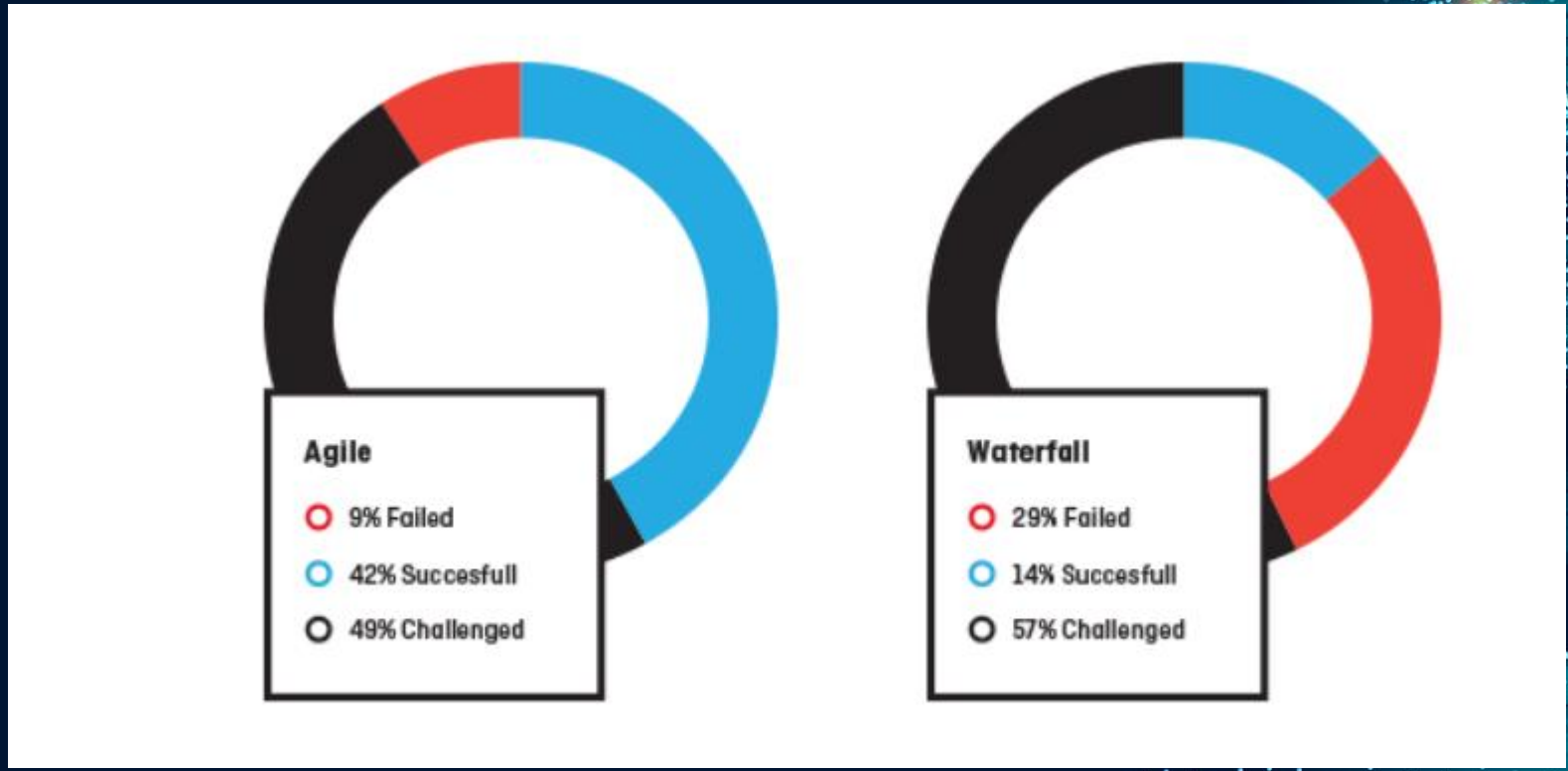


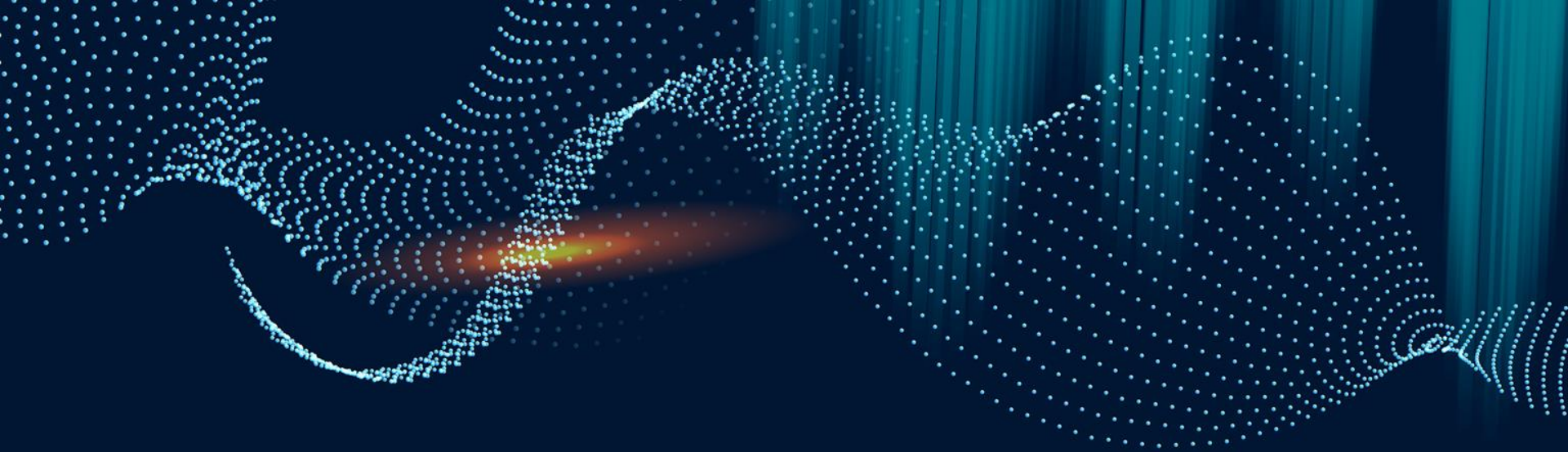
02 What’s/Why Agile?

What's/Why Agile?



What's/Why Agile?





03 Agile Manifesto/principles of Agile

Manifesto For Agile

Agile Manifesto

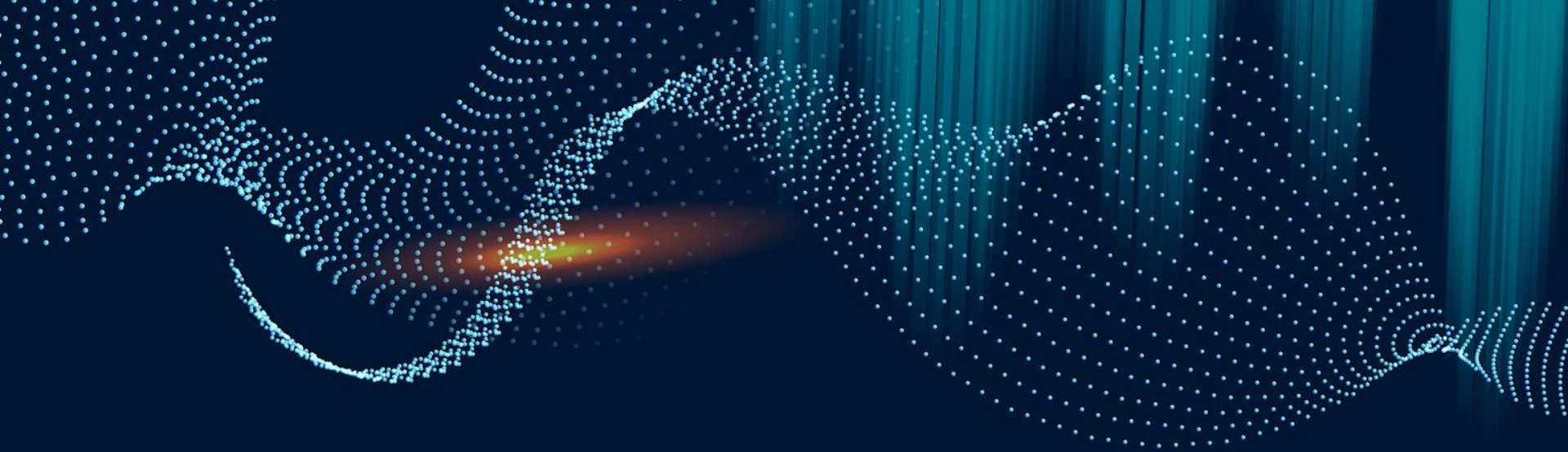
We are uncovering better ways of developing software by doing it and helping others do it.
Through this work we have come to value:

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.***

http://agilemanifesto.org/

Kent Beck
Mike Beedle
Arie van Bennekum
Alistair Cockburn
Ward Cunningham
Martin Fowler
James Grenning
Jim Highsmith
Andrew Hunt
Ron Jeffries
Jon Kern
Brian Marick
Robert C. Martin
Steve Mellor
Ken Schwaber
Jeff Sutherland
Dave Thomas



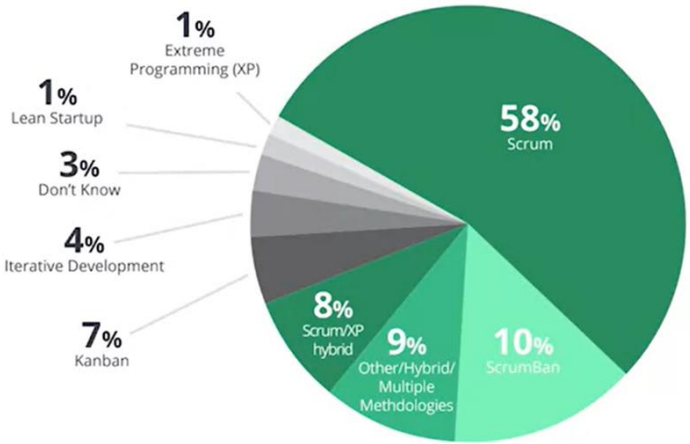
03 What’s/Why Scrum

What's/Why Scrum?

AGILE METHODS AND PRACTICES

AGILE METHODOLOGIES USED

Scrum and related variants continue to be the most common Agile methodologies used by respondents' organizations.



Total exceeds 100% due to rounding.

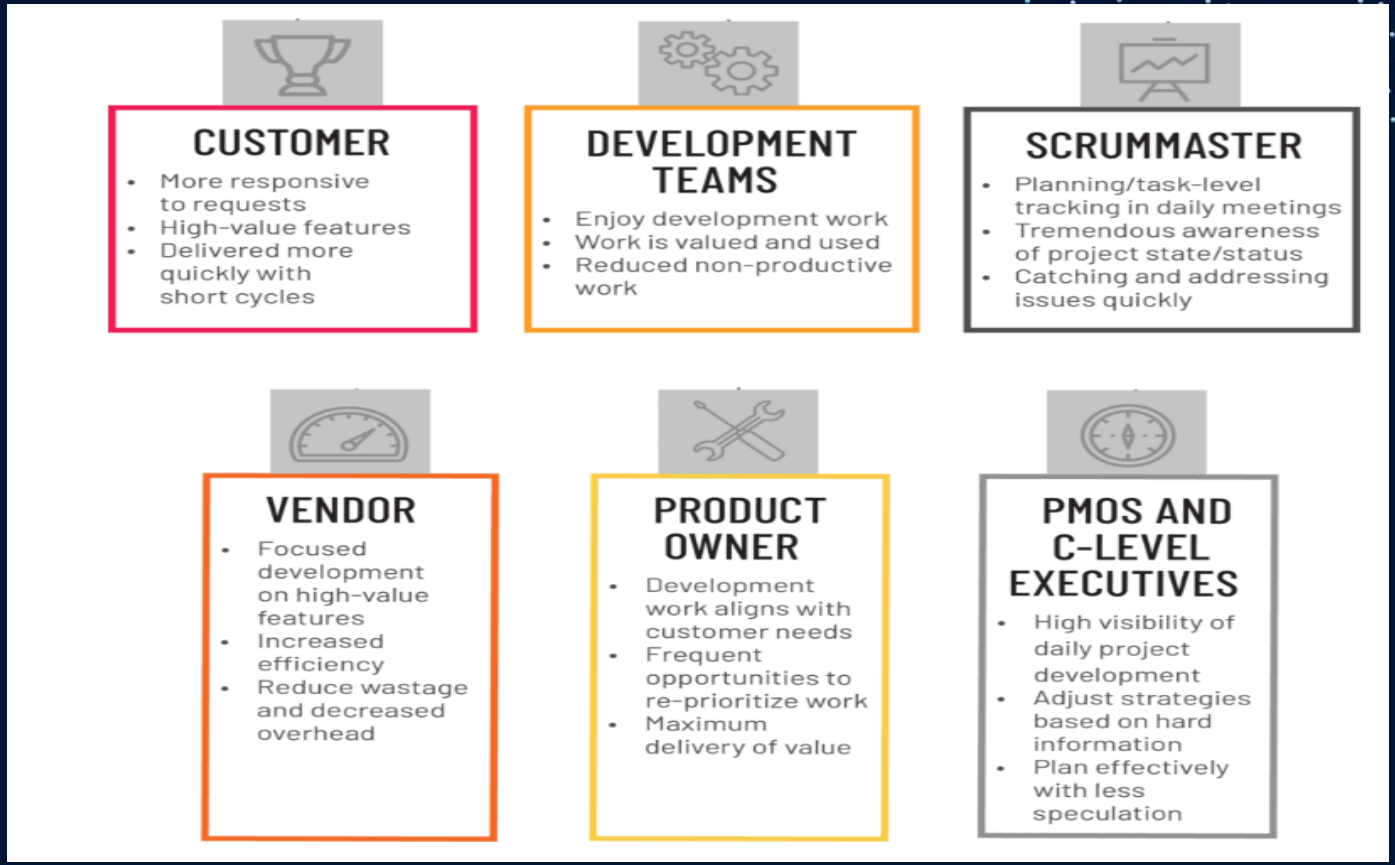
What's/Why Scrum?

- Scrum is a framework that helps teams work together.
- Scrum describes a set of meetings, tools, and roles that work in concert to help teams structure and manage their work.
- Scrum is a subset of Agile. It is a lightweight process framework for agile development, and the most widely-used one.

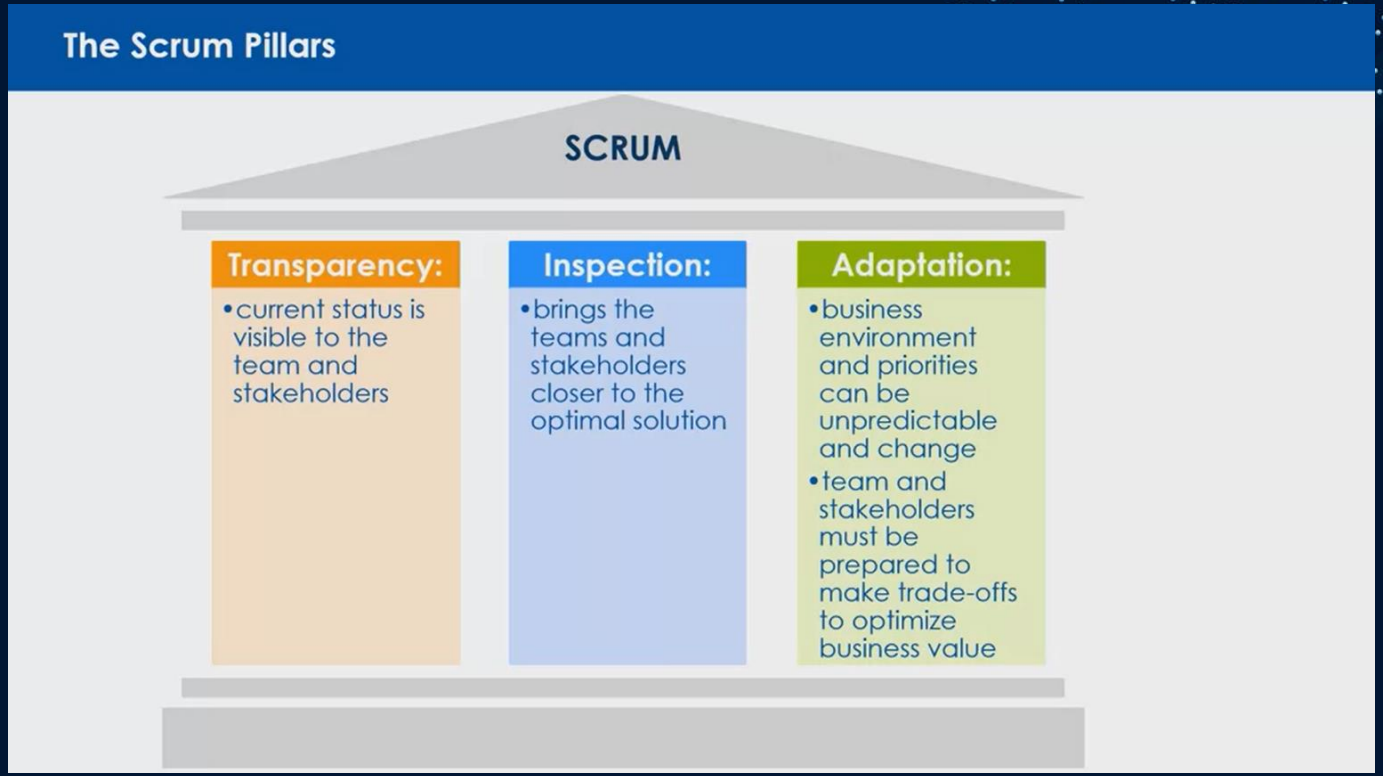
What’s/Why Scrum?

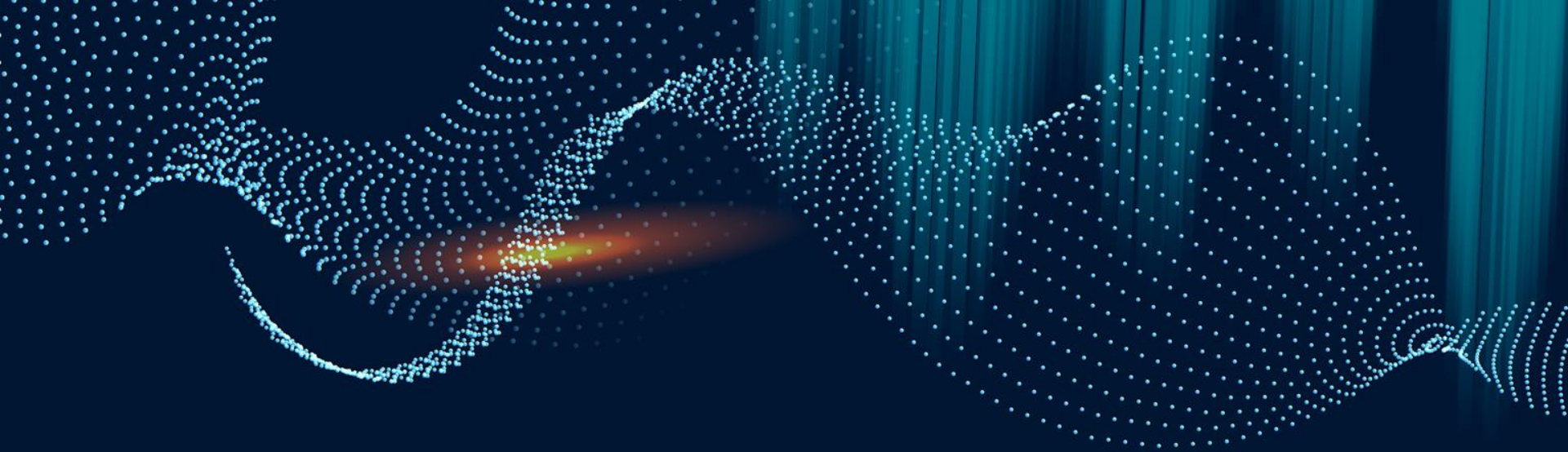
- Increase the quality of the deliverables.
- Overcome better with change (and expect the changes).
- Provide better estimates while spending less time creating them.
- Be more in control of the project schedule and state.

What's/Why Scrum?



Scrum Pillars

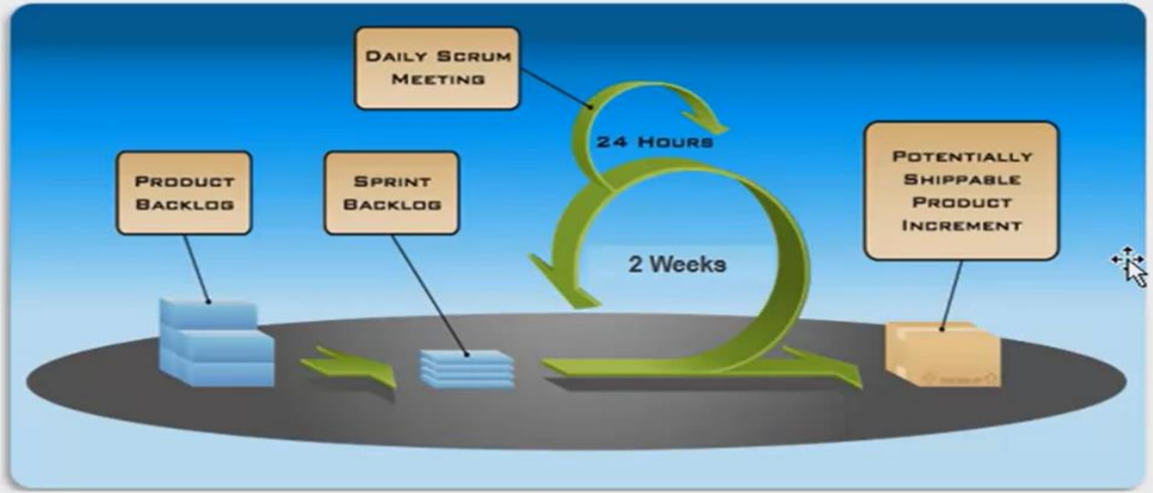




04 Scrum Overview

Scrum Overview

The Scrum Pillars and Roles



Roles

- Product Owner (Backlog)
- Scrum Master (Process)
- Scrum Team
- Customer / Stakeholder

Scrum roles promote Scrum Pillars. Each role fosters them in various degrees throughout the sprints.

Meetings

- Daily Stand-ups
- Sprint Review
- Sprint Retrospective
- Sprint Planning

Meetings and artifacts also promote Scrum Pillars and involve all teams and stakeholders.

Artifacts

- Planning, Dev, QA
- Backlog (stories, defects)
- Production (Builds, Tpubs)
- Metrics

Scrum Overview-Scrum Team

Scrum Teams

Scrum Teams	Scrum Master	Product Owner
Define the work	Facilitate the process	Represent the Customer
Build the Solution	Resolve Impediments	Prioritize the Sprints
Validate Quality	Focus the team	Accepts the work
Do the work	Serves the team	Approves Releases

Scrum Overview-Scrum Team

Scrum Roles: The Scrum Team

Define the work by collaborating with the business

Breakdown the work into simpler tasks

Scrum Team (ST)

We do the work / development

- We have the skills to deliver the product.
- We decide how to achieve each product increment.

Attend Scrum meetings

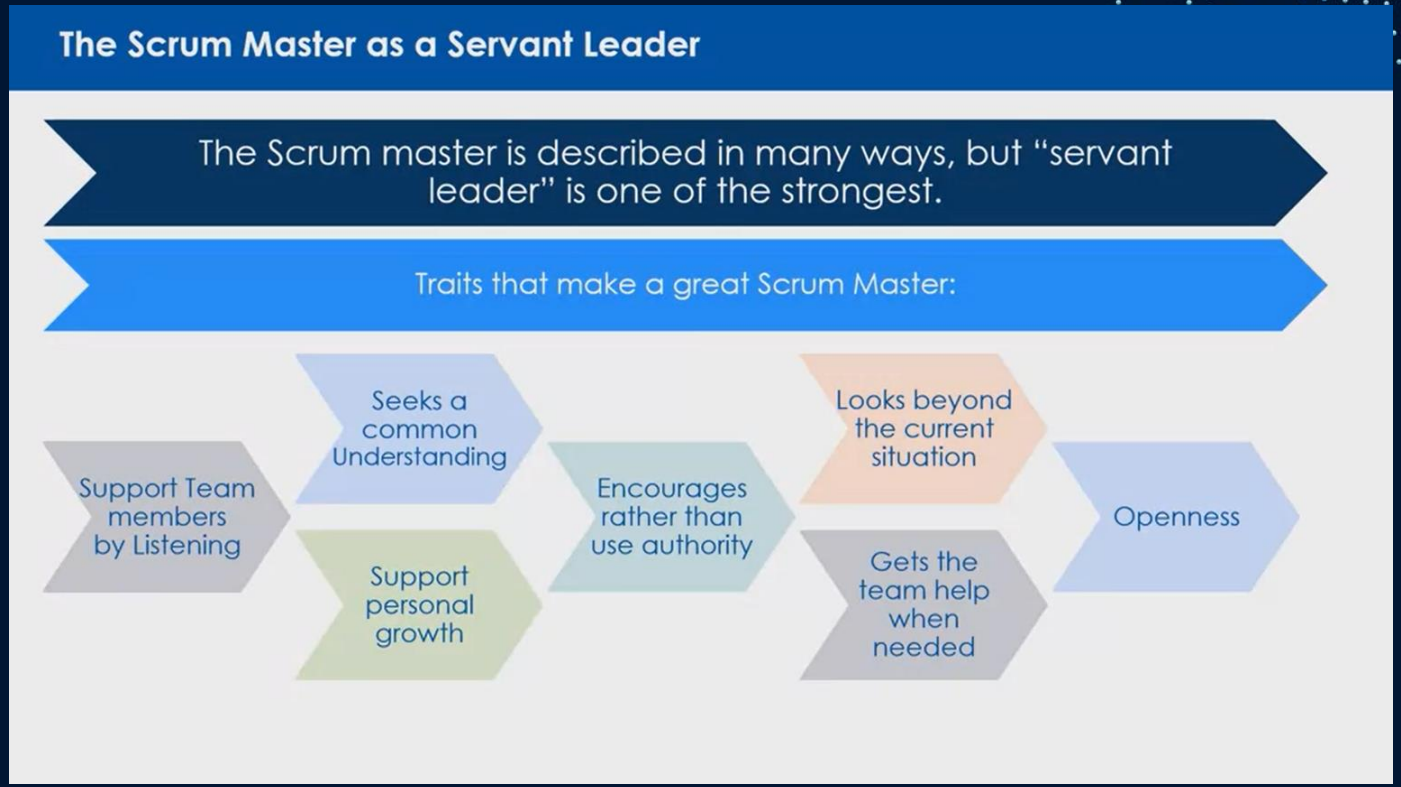
Estimate the work

Complete the work

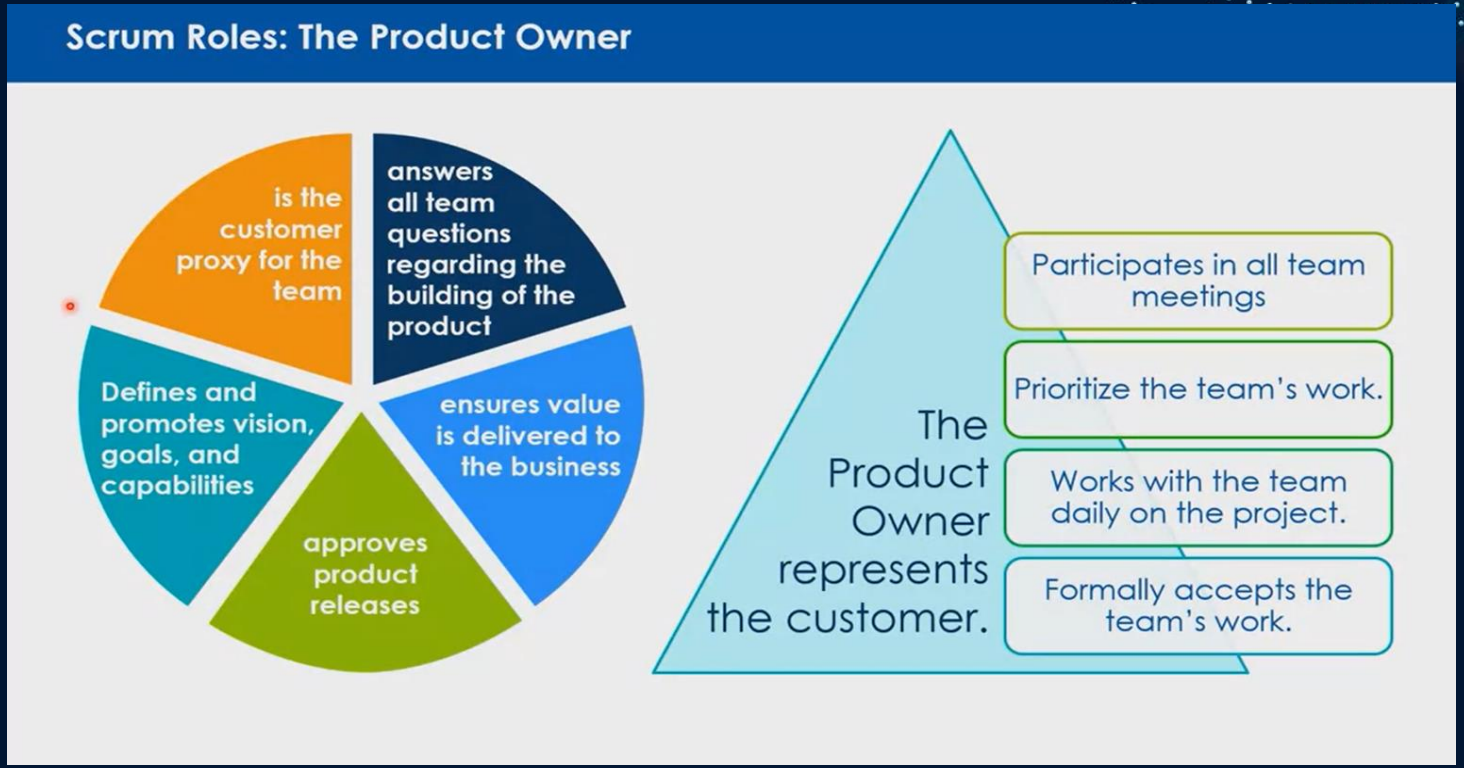
Validate the quality of the work

Scrum Teams are usually 5 to 11 members

Scrum Overview-Scrum Team



Scrum Overview-Scrum Team



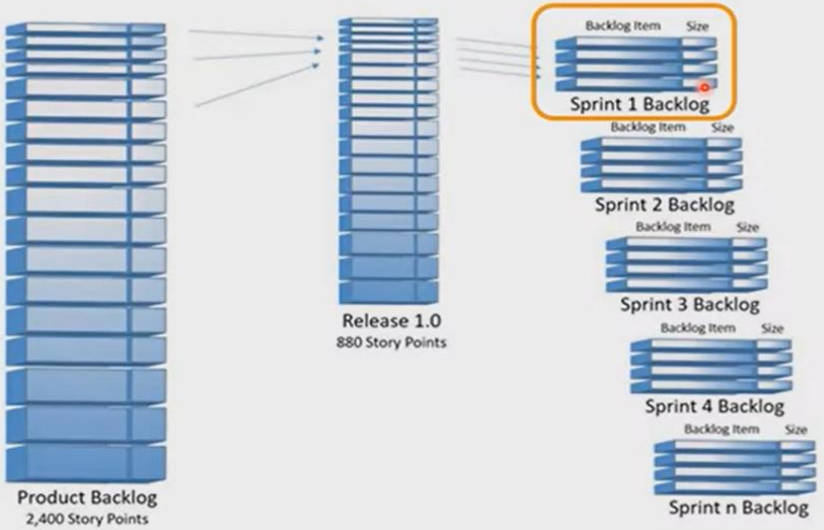
Scrum Overview-Backlog

The Sprint Backlog

is Sprint plan the team constructs

is finalized during Sprint planning

total estimated points of the User Stories equals the team's velocity



Scrum Overview
Estimations

Story Points

Estimate Stories with relative Story points

- A Story point is a singular number that represents:
  - How big is the User Story effort..
  - How much is unknown..
  - The bigger the effort, the higher the estimation in Story Points.
  - The more unknowns, the higher the estimation in Story Points.
  - The most popular Story Point scale is the Rounded, or Modified, Fibonacci scale: 1, 2, 3, 5, 8, 13, 20, 40, 100.
  - There are other scales, for example: Powers of 2, Small, Medium and Large.

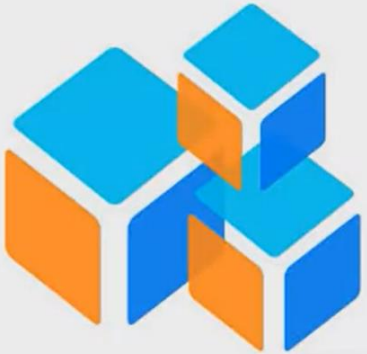
Support: A 2 point User Story is about double the effort of a 1 point User Story.

Scrum Overview
Estimations

Story Points

Estimate Stories with relative Story points

- A 1 point User Story is a User Story that can be coded and tested in 1 day.
- In other words, the User Story can get to Done in 1 day.
- Any User Story that is about double the effort is a 2 point User Story.
- Any User Story that is about triple the effort of the 1 point User Story, is a 3 point User Story.
- Continue to estimate using the same relative approach.



Support: A 2 point User Story is about double the effort of a 1 point User Story.

Scrum Overview-Events

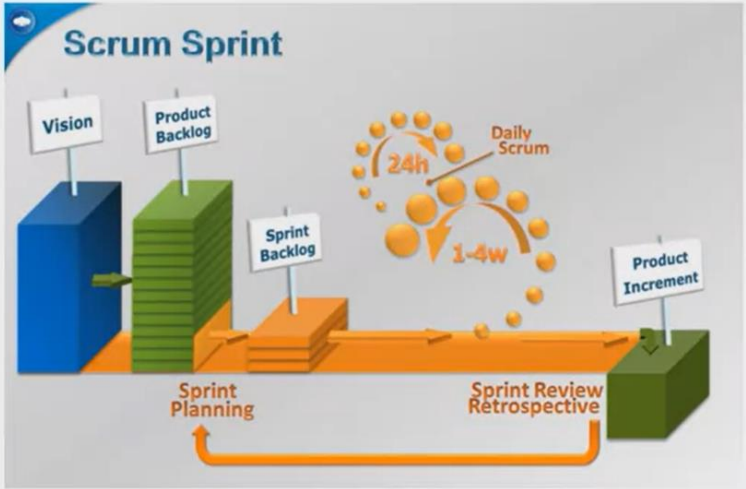
Scrum Events:-

- Sprint planning.
- Daily Stand-up.
- Sprint Review.
- Sprint Retrospective.

Scrum Overview-Events

The Sprint

- is the product's development iteration
- is the foundation of Agile economics
- is a combination of a set timebox, and a required set of events, or meetings
- supports the Iterative development which allows the team to build, learn, and collaborate with the customer



Scrum Overview-Events

The Sprint Planning Meeting

- is where the team plans what is hopes to accomplish and complete during the upcoming Sprint

- Scrum Master facilitates the Sprint Planning meeting
- is timeboxed for 1 to 2 hours.
- When the team estimates Users Stories, the estimation is done so collaboratively

Scrum Overview-Events

- Daily Stand up (DSU), is the team's mini status meeting, and planning session
- is for the team
- is time boxed for no more than 15 minutes
- In order to maintain the 15-minute time box, the Daily Scrum has a script

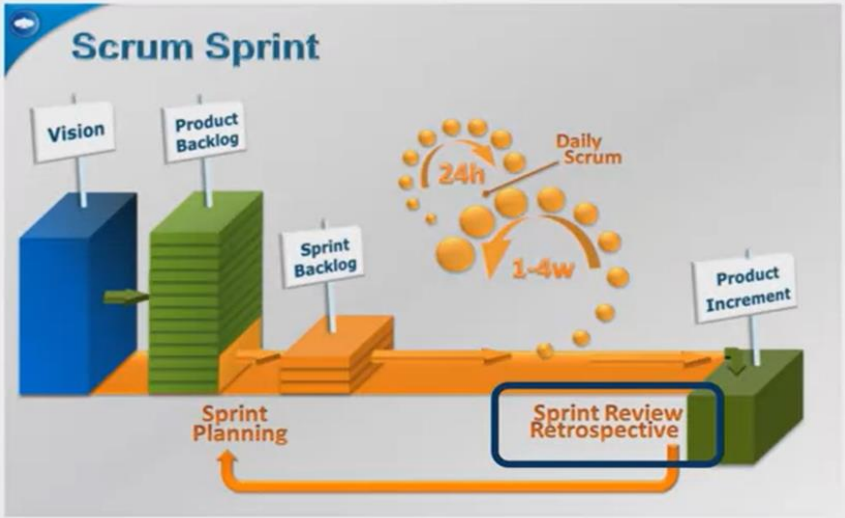
Each team member answers the 3 questions

- Yesterday, I completed …
- Today, I am working on …
- Here are my impediments and blockers…

Scrum Overview-Events

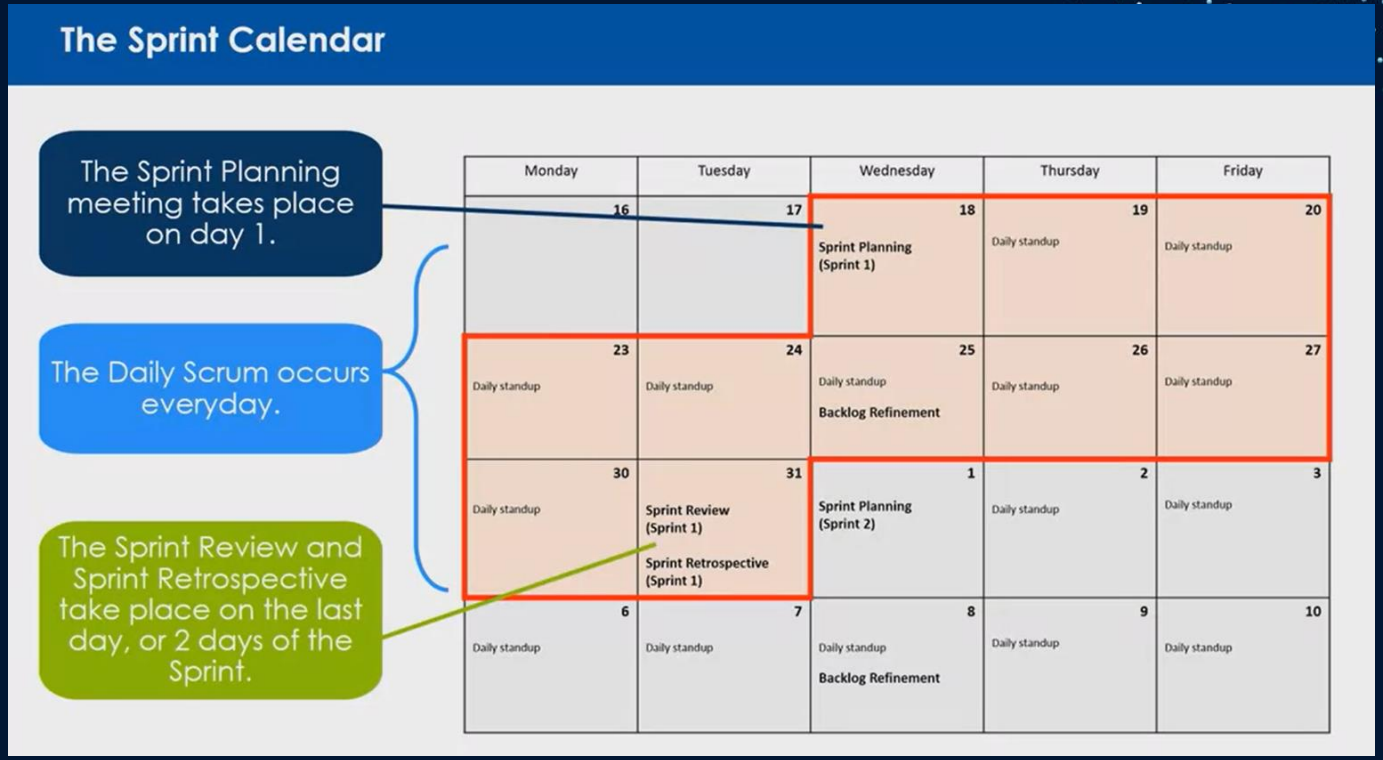
The Sprint Review Meeting

- is where the team runs and demonstrates the current product to themselves, the Product Owner and any relevant stakeholders
- product must be packaged and running in the intended architecture
- is the formal time to "Check" the product and validate progress, as the Agile Manifesto states
- Teams demonstrate every Story, and knowledge gained form learning activities
- timebox is 1 to 2 hours



Scrum Overview-Events

Scrum Overview-Events



Scrum Overview-DoD

The Definition of Done (DoD)

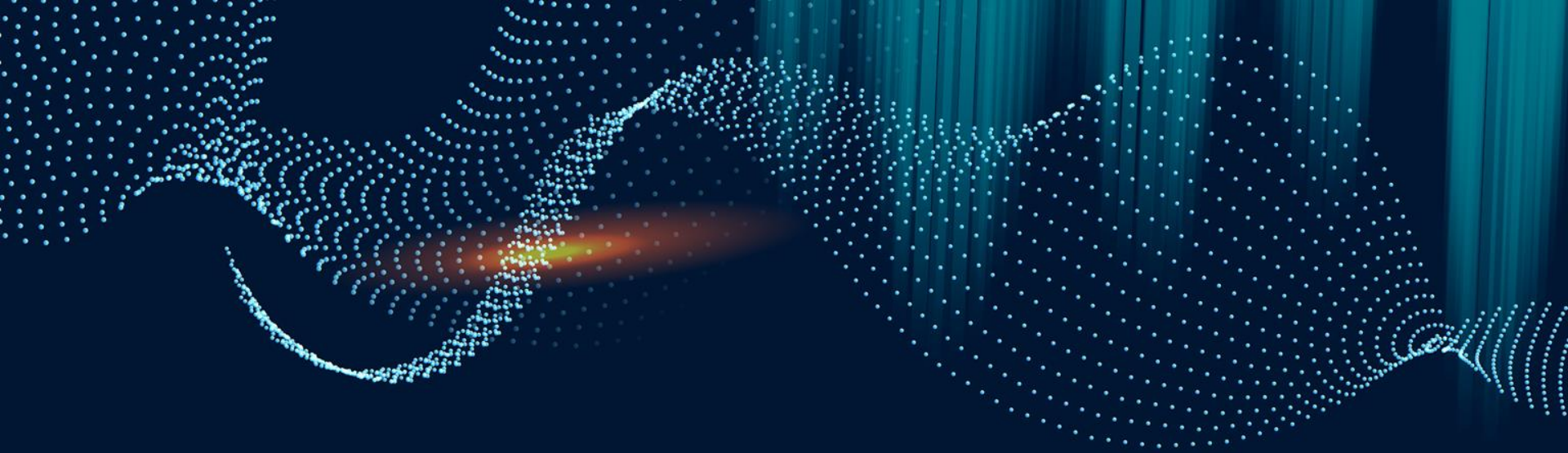
The Definition of Done (DoD) is a check list of items that the team, the Product Owner, and Stakeholders agree must be completed before the User Stories can be consider Done.

The DoD is some levels of testing, some levels of documentation and other tasks.

DoDs experience levels of maturity.

The DoD is similar to Exit Criteria.

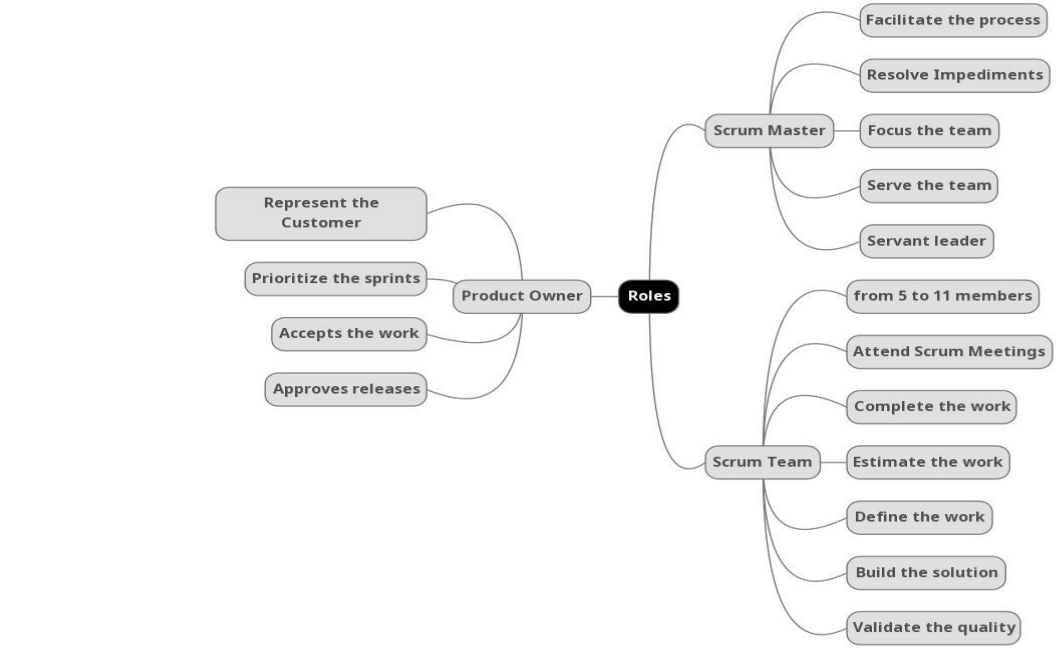
Definition of Done
Acceptance Criteria Satisfied
Acceptance Test Run and Passed
Unit Tests Run
New User Stories Test run and Passed
Code and Documents are checked into the team repository
Compliance tasks complete
User Stories are Accepted by the Product Owner.

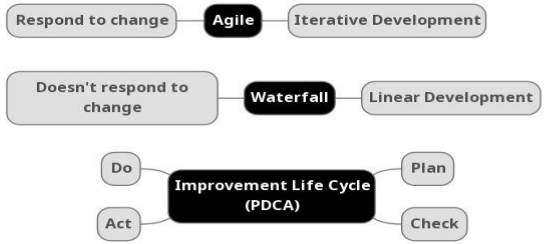


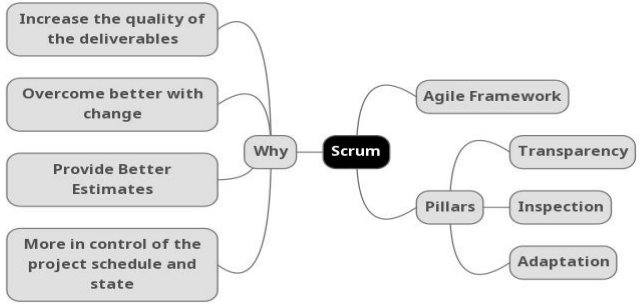
05 Tools

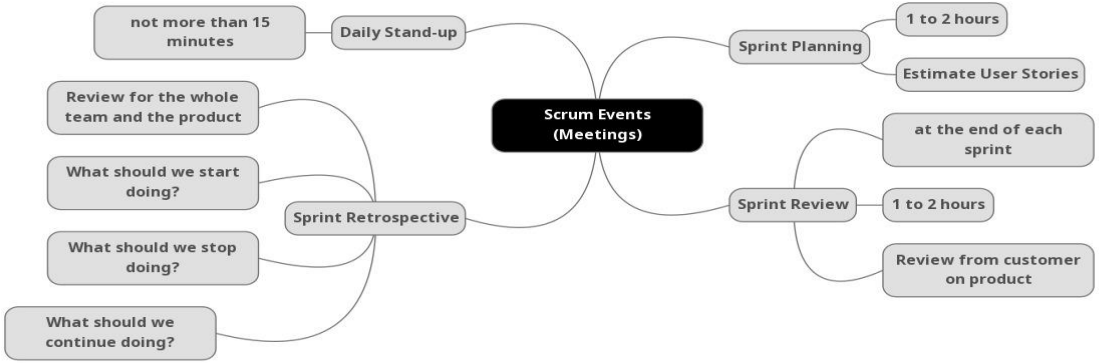
Tools

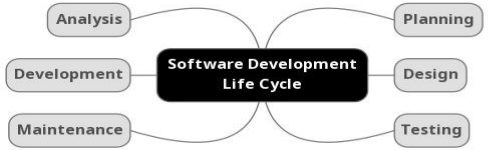
- Jira.
- Click-up.
- Notion.
- Trello.
- Confluence.











Created by: Bishoy Sedra

Acknowledgment

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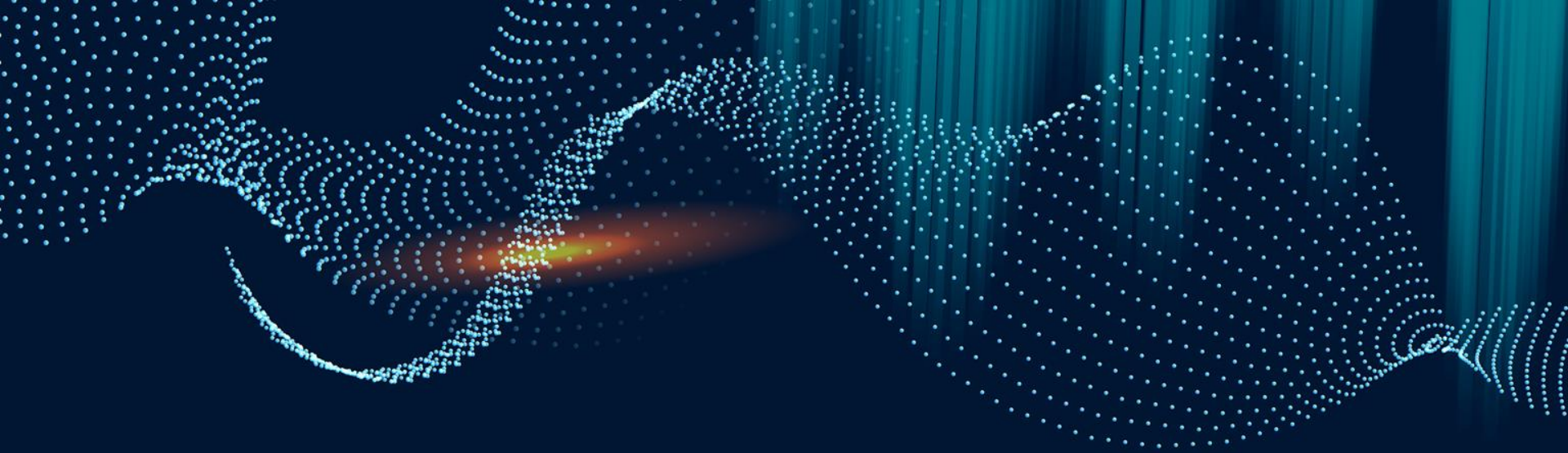

Thank You!