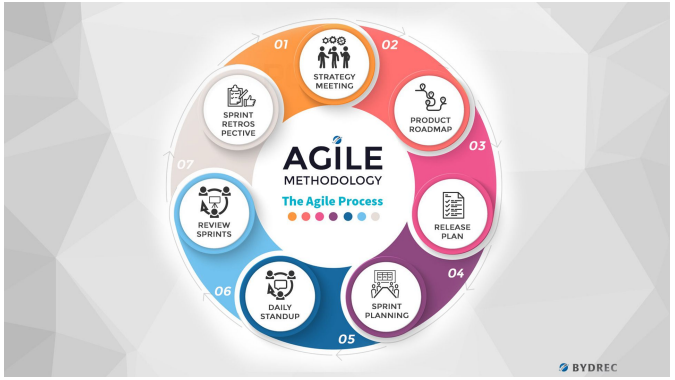
Agile/SCRUM

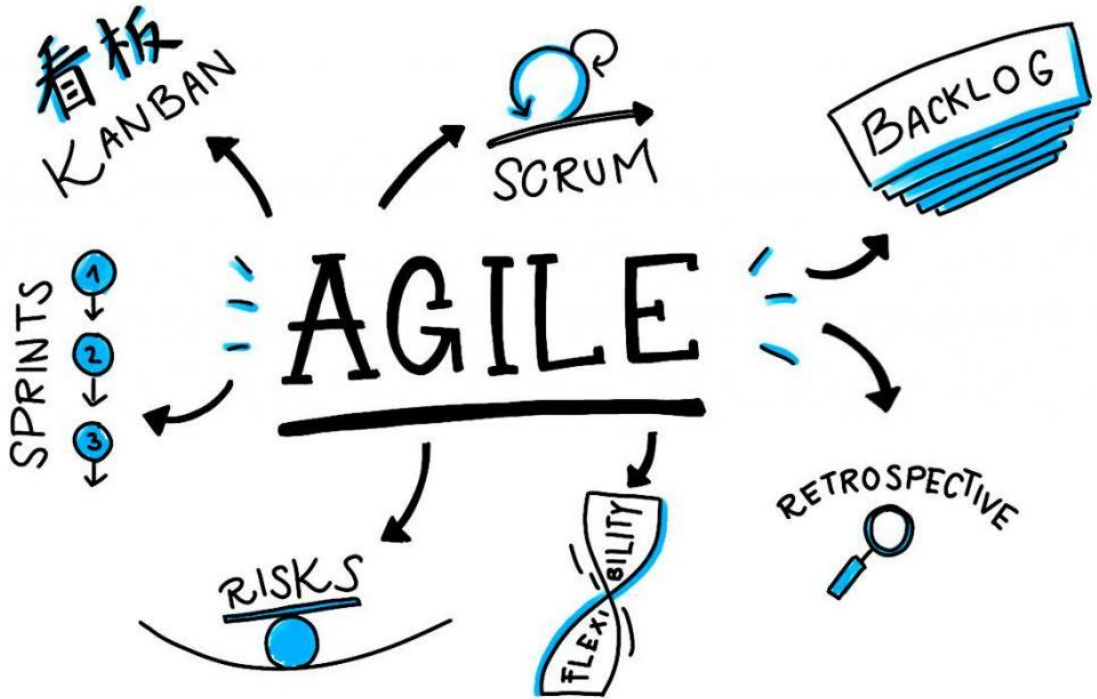
Agile Methodology

Agile is an **iterative approach** to project management and software development that helps teams **deliver value to their customers faster** and with fewer headaches

Individuals and interactions *over processes and tools*
Working software *over comprehensive documentation*
Customer collaboration *over contract negotiation*
Responding to change *over following a plan*

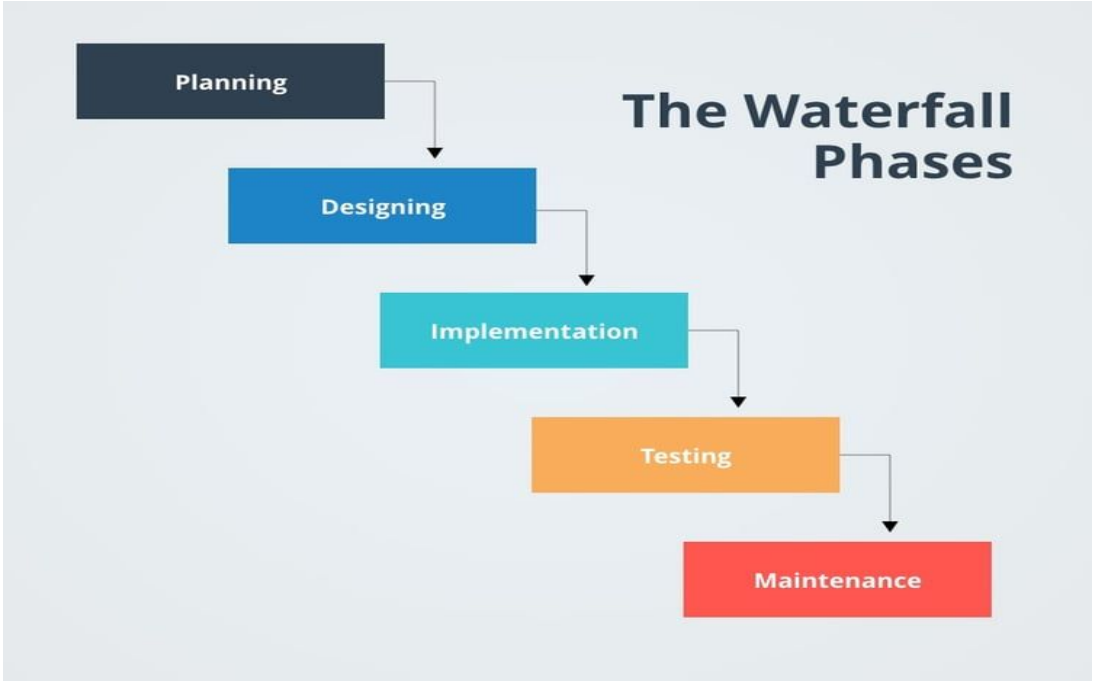


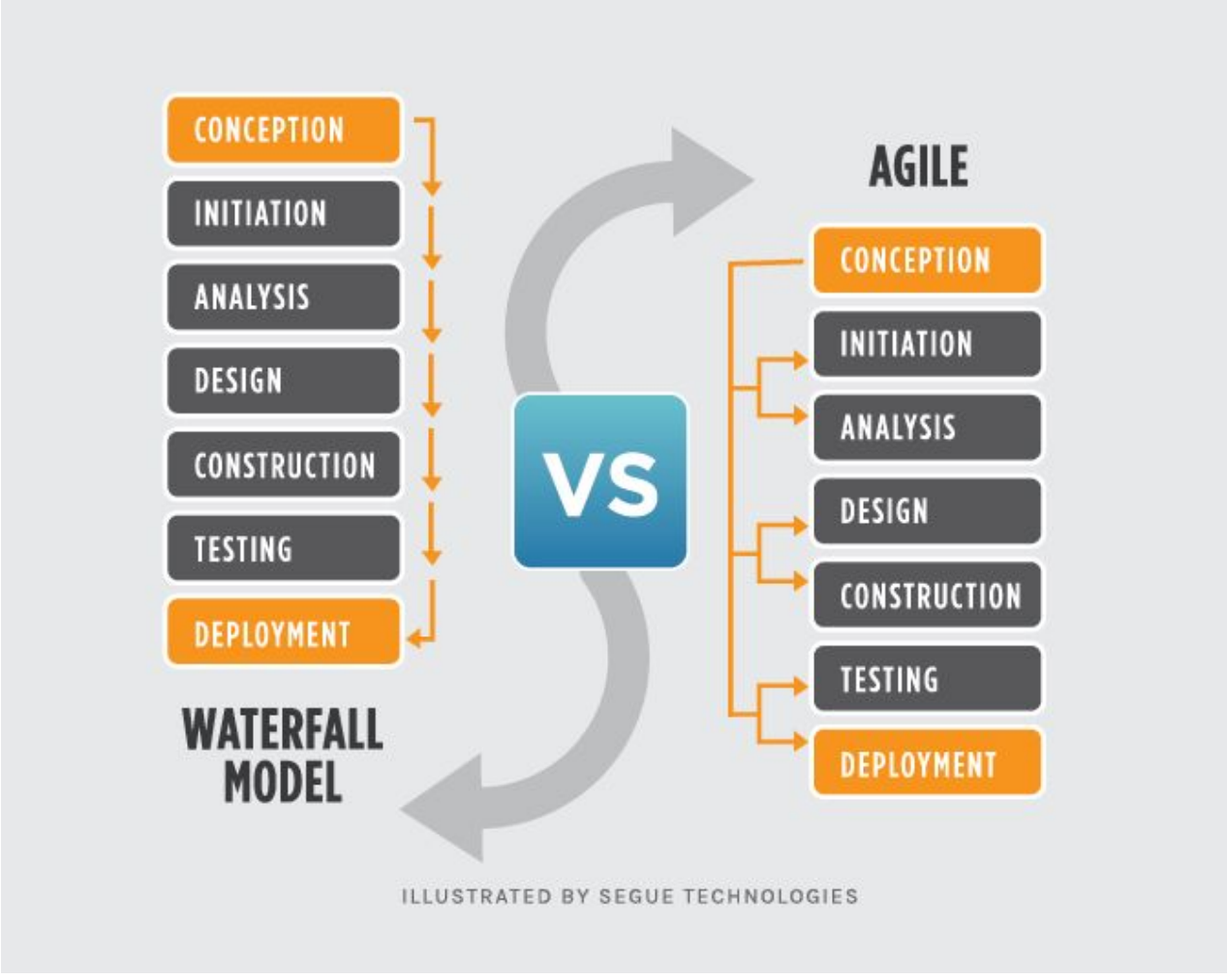
That is, while there is value in the items on the right, we value the items on the left more


看板
KANBAN
SCRUM
BACKLOG
AGILE
SPRINTS
1
2
3
RISKS
FLEXIBILITY
RETROSPECTIVE

Waterfall Approach

Waterfall is a linear approach to software development. In this methodology, the sequence of events is something like:




CONCEPTION
INITIATION
ANALYSIS
DESIGN
CONSTRUCTION
TESTING
DEPLOYMENT
WATERFALL MODEL
VS
AGILE
CONCEPTION
INITIATION
ANALYSIS
DESIGN
CONSTRUCTION
TESTING
DEPLOYMENT
ILLUSTRATED BY SEGUE TECHNOLOGIES

What is Agile project management

Originally created for software development,
the Agile approach to project management is quickly being adapted by more than just IT teams.

- Marketers
- Universities,
- the military,
- and even the automotive industry

are also looking at the Agile methodology and other Agile frameworks to deliver innovative products in uncertain environments.

The Agile Manifesto

The Agile Manifesto outlines 4 Core Values and 12 Guiding Principles which serve as a North Star for any team adopting an Agile methodology.

The Agile Manifesto - Core values

01	**Individuals and interactions over processes and tools**	• As sophisticated as technology gets, the human element will always serve as an important role in any kind of project management. Relying too heavily on processes and tools results in an inability to adapt to changing circumstances.
02	Working software over comprehensive documentation	• As important as documentation is, working software is more. This value is all about giving the developers exactly what they need to get the job done, without overloading them.
03	**Customer collaboration over contract negotiation**	• Your customers are one of your most powerful assets. Whether internal or external customers, involving them throughout the process can help to ensure that the end product meets their needs more effectively.
04	**Responding to change over following a plan**	• This value is one of the biggest departures from traditional project management. Historically, change was seen as an expense, and one to be avoided. Agile allows for continuous change throughout the life of any given project. Each sprint provides an opportunity for review and course correction.

The Agile Manifesto - Principles

Agile methodologies can be as diverse and unique as each individual team, but the 12 Principles of Agile should always guide your decisions and product development.

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software (or whatever else you deliver).

2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

3. Deliver projects frequently, from a couple of weeks to a couple of months, with a preference for the shorter timescale.

The Agile Manifesto - Principles

4. Coordinating team members must work together daily throughout the project.

5. Build projects around motivated individuals. Give them the environment and support they need and trust them to get the job done.

6. Face-to-face conversation is the most efficient and effective method of conveying information to and within different teams.

7. The final product is the primary measure of progress.

The Agile Manifesto - Principles

8. Agile processes promote sustainable development. All stakeholders should be able to maintain a constant pace indefinitely.

9. Continuous attention to technical excellence and good design enhances agility.

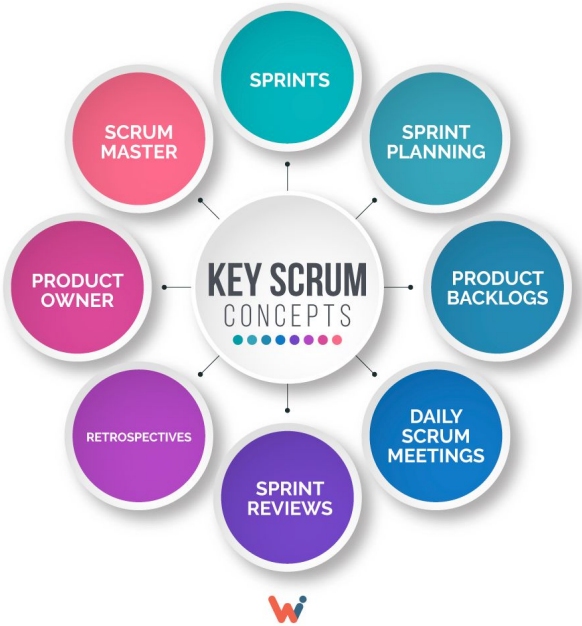
10. Simplicity—the art of maximizing the amount of work not done—is essential.

11. The best architectures, requirements, and designs emerge from self-organizing teams.

12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

What is Scrum?

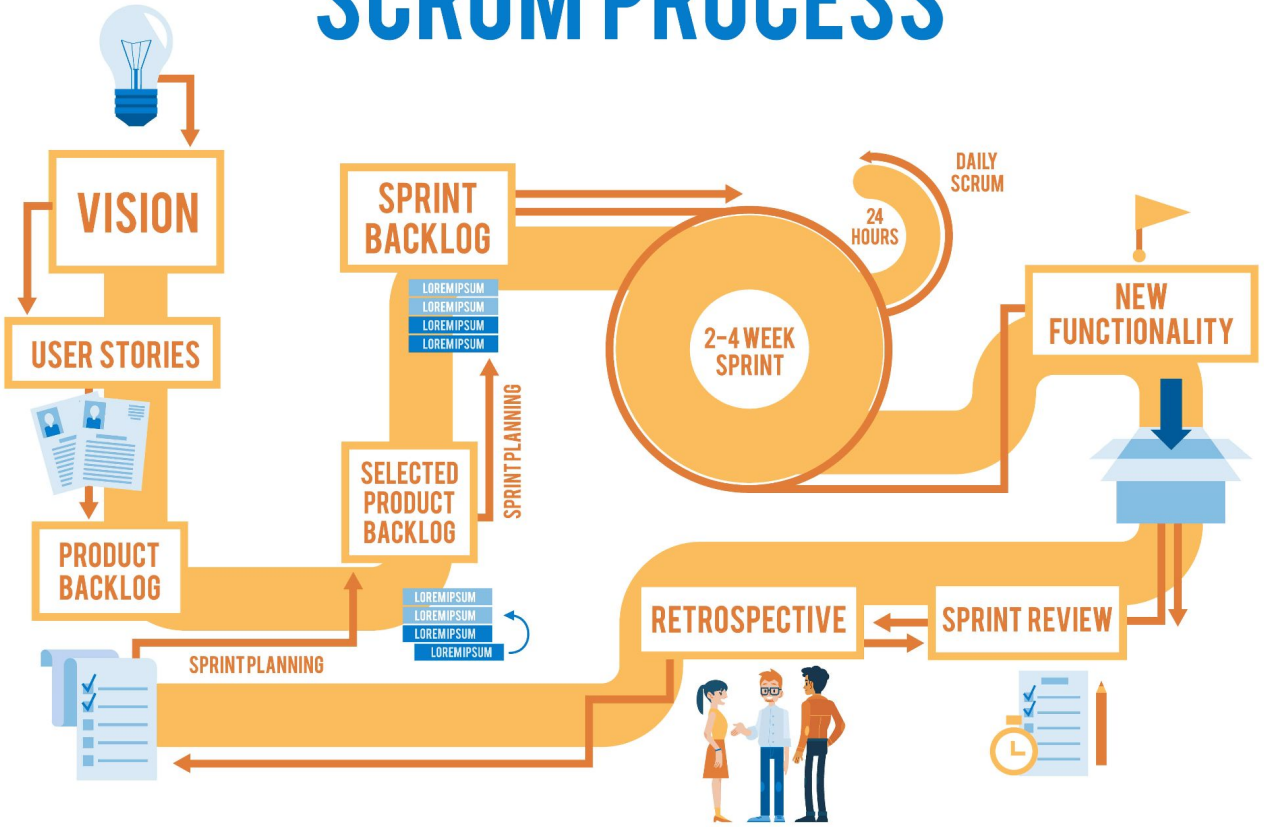
Scrum is a simple, lightweight agile process framework designed
to help small cross-functional and self-organized teams develop complex products.



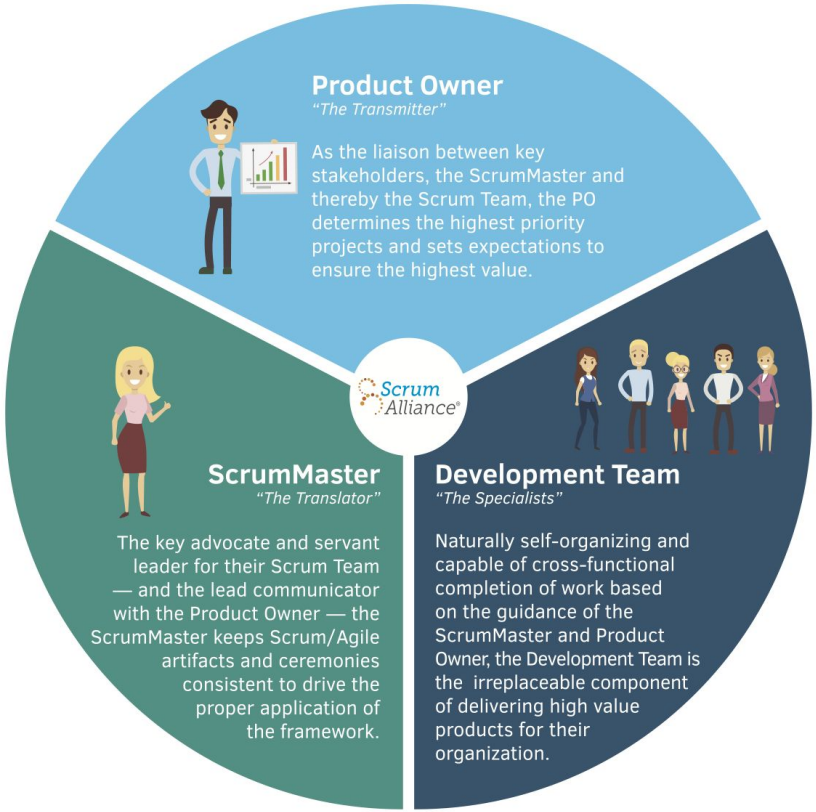
SCRUM

- Scrum is a framework for project management[1] commonly used in software development, although it has been used in other fields including research, sales, marketing and advanced technologies.[2]
- It is designed for teams of ten or fewer members who break their work into goals that can be completed within time-boxed iterations, called sprints.
- Each sprint is no longer than one month and most commonly lasts two weeks.
- The scrum team assesses progress in time-boxed daily meetings of 15 minutes or fewer, called daily scrums (a form of stand-up meeting).
- At the end of the sprint, the team holds two further meetings: one sprint review intended to demonstrate the work done for stakeholders and solicit feedback, and one sprint retrospective intended to enable the team to reflect and improve.

SCRUM PROCESS

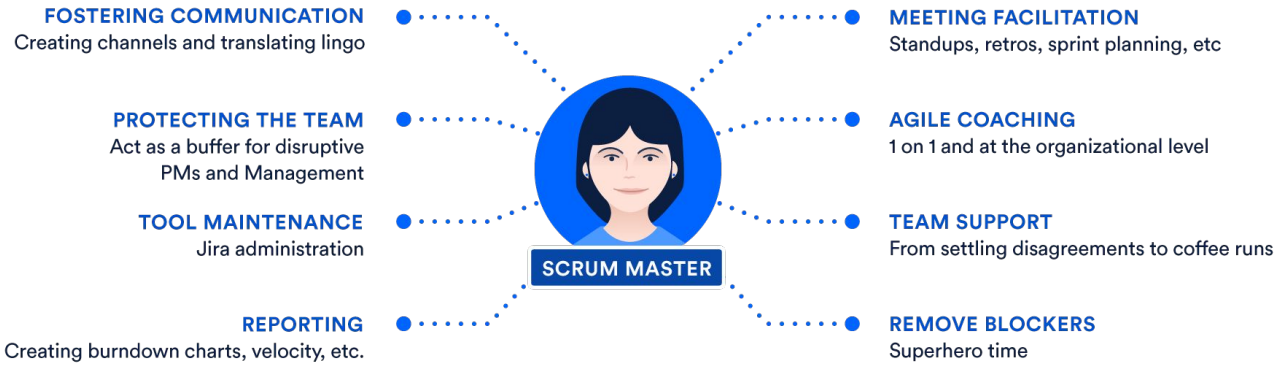


Scrum Team


Product Owner
"The Transmitter"
As the liaison between key stakeholders, the ScrumMaster and thereby the Scrum Team, the PO determines the highest priority projects and sets expectations to ensure the highest value.
Scrum Alliance
ScrumMaster
"The Translator"
The key advocate and servant leader for their Scrum Team — and the lead communicator with the Product Owner — the ScrumMaster keeps Scrum/Agile artifacts and ceremonies consistent to drive the proper application of the framework.
Development Team
"The Specialists"
Naturally self-organizing and capable of cross-functional completion of work based on the guidance of the ScrumMaster and Product Owner, the Development Team is the irreplaceable component of delivering high value products for their organization.

Scrum Master

The scrum master leads the scrum team. They resolve issues and have complete control over the process.



Scrum Master

- Owns the process
- Protects team
- Not the boss
- Facilitator

SAFapply Scrum Master

The Scrum Master role will be tailored to suit the needs of the SAFapply product. The scrum master role

- The scrum master role will rotate on a sprint by sprint bases.
- Each team member will have a chance to wear the scrum master hat.

SAFapply scrum master responsibilities:

- The scrum master facilitates all the scrum ceremonies (Standup/ Sprint review/retro)
- The scrum master removes impediments that may hamper productivity in the team.
- The scrum master ensures all tickets are moved to ‘tested on dev’ by the end of the sprint.
- The scrum master works with the PM to ensure ticket alignment and clarity.

The Development Team

An integral part of a bigger Scrum team. It is comprised of professionals who deliver a potentially releasable Increment of “Done” product at the end of every Sprint. At the Sprint Review, a “Done” increment is required.

Functions of The Development Team

The Development Team

- They are self-organizing.
- Development Teams are cross-functional
- Create each increment of showable product
- Skilled in whatever is needed for project
- Including: developers, testers, designers,...
- Scrum recognizes no sub-teams in the Development Team

THANK YOU