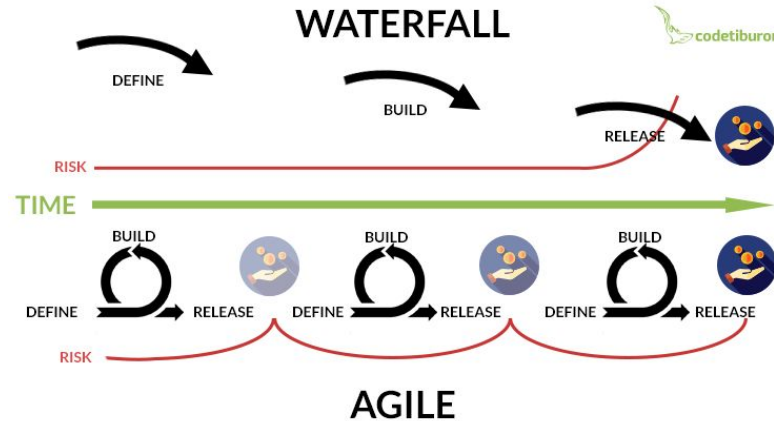


Scrum for SRL

Owen Kaufmann

What is Agile/Scrum?

- Scrum is a product development methodology that is a subset of Agile.
- A highly adaptable framework with an emphasis on frequent iterations and functional prototyping.
- Increasingly popular alternative to waterfall-style development cycle:



Roles in Scrum

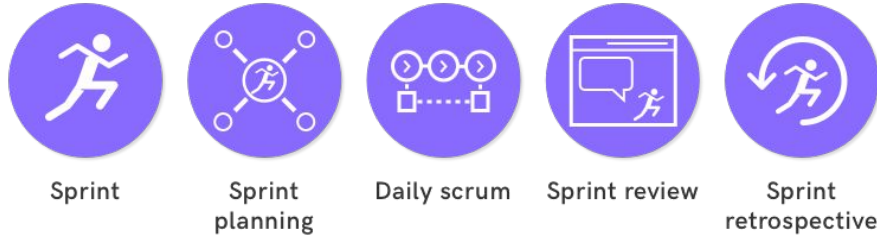


Product Owner - Sole person responsible for product backlog. Communicates the mission to the team.

Development Team - Small, self-organizing, and cross-functional team devoted to product development.

Scrum Master - The team's dedicated coach for how to use their development framework most effectively. They are servant leaders.

Components of Scrum: Events



Sprint - A time block of < 1 month. Development team must complete a deliverable in this timeframe.

Sprint Planning - Time block to plan out the next sprint.

Daily Scrum - 15-minute time box to inspect progress and plan the next 24 hrs of sprint.

Sprint Review - An all-hands to evaluate the completed sprint increment, decide next steps.

Sprint Retrospective - A look back on team performance; a time to suggest and orchestrate improvements to the team dynamic.

Components of Scrum: Artifacts

Product Backlog - Evolving list of tasks required to complete the project.

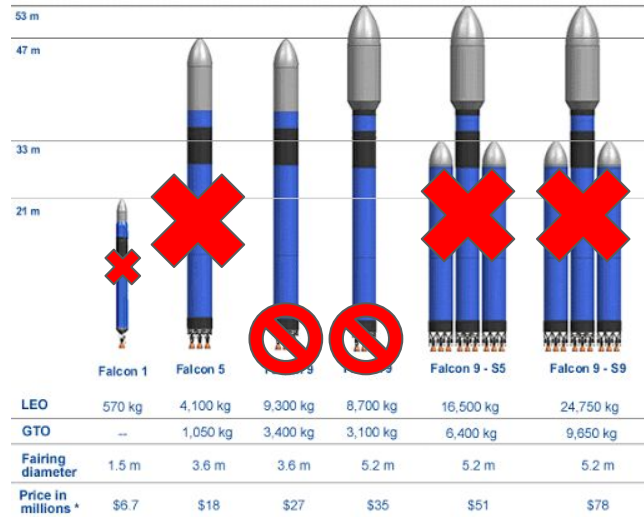
Sprint Backlog - Subset of product backlog, everything needed to complete the sprint.

Increment - The collection of work completed by the end of the sprint which comprises a deliverable product.



Benefits of Scrum

Old SpaceX Documents: Note how many ideas they abandoned for newer, better ones.



* Prices are all inclusive of launch range, third party insurance and standard payload integration costs.

Transparency: More people who know what's going on.

- Small teams.
- Visible product backlog.
- Clearly-defined time blocks.

Inspection: Learning from history.

- Best practices passed on.
- Team performance documented. What worked? What didn't?
- Lessons don't have to be learned the hard way as often.

Adaptation: Why SpaceX is awesome.

- Short development cycles reduce risk, meaning **bolder (Boulder?) technologies can be considered.**
- Ability to **instantly change direction** in a rapidly evolving development process.

Scrum for SRL: Recommended Implementations

- **Sprint Schedule**
- **Product Backlog**
- **Scrum Team Structure**
 - Product owner.
 - Development team of 3-9 members.
 - Scrum master.
- **Greater Overall Transparency**
 - Standardized documentation.
 - Common Definition of “Done”

**For an exhaustive list of all recommendations, see [LD0004 - Agile Scrum Overview](#).

Scrum for SRL: Expected Results

- **More active members** due to increased transparency.
 - Recruiting.
 - Member retention.
- **Delivering on-time** more often.
 - Rapid deliverable turnover.
 - Reduced risk in a very risky business.
 - More concrete/more visible development schedule.
- **Better designs.**
 - Frequent inspections.
 - Increased transparency.
- **SRL member hireability.**
 - Agile experience is a very marketable skill in the aerospace industry.

Questions?

For a more detailed overview of Scrum and its application to SRL, see [LD0004 - Agile Scrum Overview](#)

If you really want to go down the rabbit hole, there is a lot of information out there about Scrum, however it is very dry.