Scrum Basics

Flavio De Roni
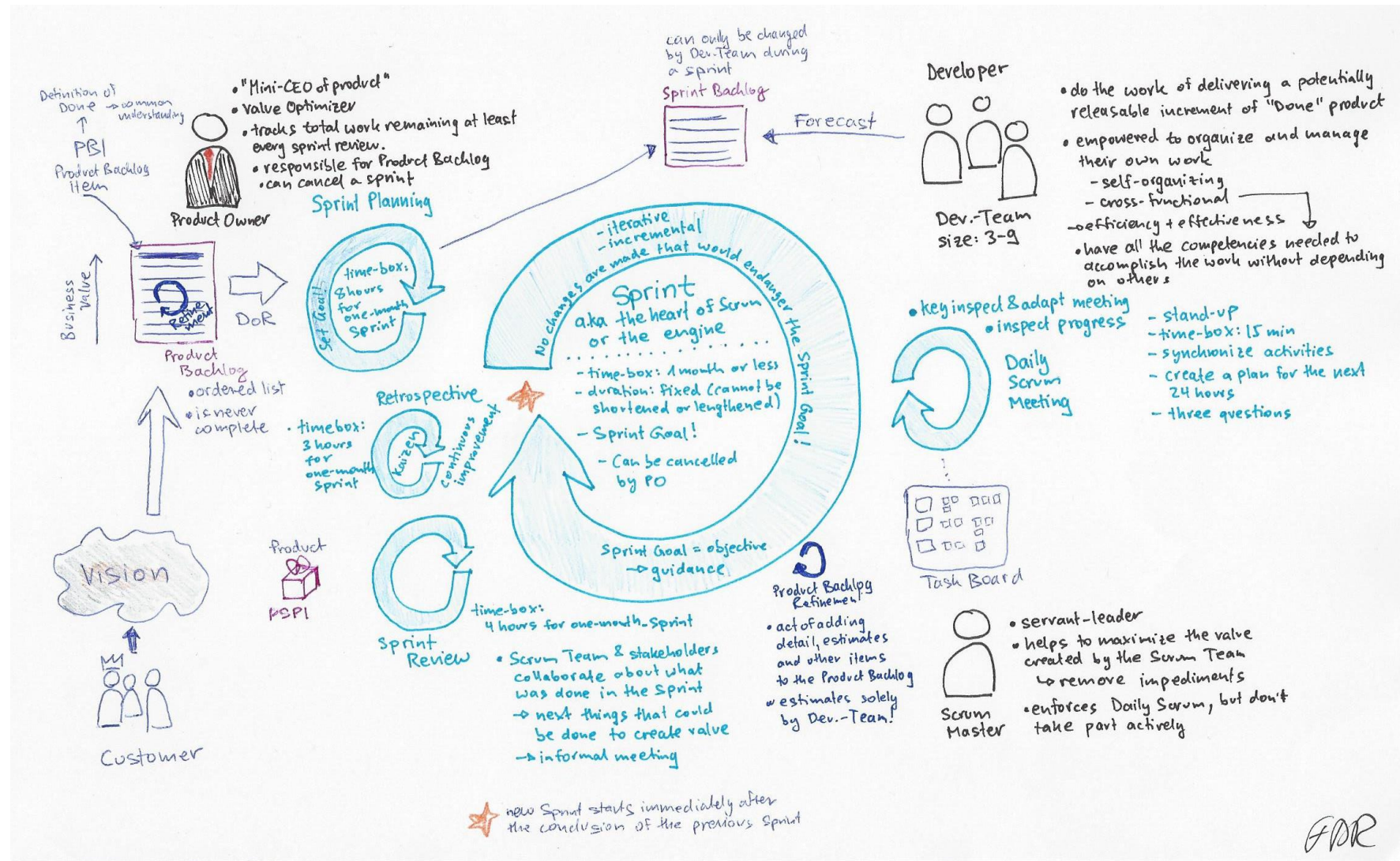
Scrum Fundamentals

according to [Scrum Guide™](#) of July 2016

Scrum (n.)

A framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value.

Scrum Overview

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- 3 Roles
  - Product Owner
  - Scrum Master
  - Developer

- 3 Artifacts
  - Product Backlog
  - Sprint Backlog
  - Potential Shippable Product Increment (PSPI)

- 5 Events
  - Sprint
  - Sprint Planning
  - Sprint Review
  - Sprint Retrospective
  - Daily Scrum (Stand-Up)

Scrum Overview

- Scrum Team consists of
  - Product Owner
  - Scrum Master
  - Developer

- Team is self-organized and cross-functional, meaning that they have all competencies needed to accomplish the work without depending on others.

- Based on empirical process control (empiricism)
  - Transparency
  - Inspection
  - Adaption

- Key inspect and adapt events are:
  - Daily Scrum
  - Sprint Retrospective
  - Sprint Review

Product Owner
«Mini-CEO of the Product»

- Maximizing the value of the product and the work of the development team («Value Optimizer»)

- Responsible for product backlog

- Can cancel a sprint

Scum Master
Servant Leader

- Servant-leader
- Helps maximize the value created by the Scrum Team → remove impediments
- Enforces Daily Scrum, but don't take part actively in it
- Scrum teacher

Developer
Dev-Team: self-organizing and cross-functional

- Title: Developer
- Do the work of delivering a potentially releasable increment of «Done» product
- Empowered to organize and manage their own work
- Self-organizing
- Cross-functional

Product Backlog
Living artifact

- The Product Backlog is an ordered list of everything that might be needed in the product.

- Responsible for the Product Backlog is the Product Owner.

- A Product Backlog is never complete.

- As long as the product exists, its backlog also exists.

- The Product Backlog is dynamic; it constantly changes to identify what the product needs to be appropriate, competitive, and useful.

- Requirements never stop changing, so a Product Backlog is a living artifact.

Sprint Backlog
Forecast about upcoming functionality

- The Sprint Backlog is the set of Product Backlog items selected for the Sprint, plus a plan for delivering the product Increment and realizing the Sprint Goal.

- The Sprint Backlog is a forecast by the Development Team about what functionality will be in the next Increment and the work needed to deliver that functionality into a "Done" Increment.
(Note: in the older Scrum Guide (2013) they talked about a Dev.-Teams commitment to a Sprint, now it's "only" a forecast.)

- The Sprint Backlog makes visible all of the work that the Development Team identifies as necessary to meet the Sprint Goal.

PSPI
Potential Shippable Product Increment

- The Increment is the sum of all the Product Backlog items completed during a Sprint and the value of the increments of all previous Sprints.

- At the end of a Sprint, the new Increment must be "Done," which means it must be in useable condition and meet the Scrum Team's definition of "Done."

- It must be in useable condition regardless of whether the Product Owner decides to actually release it.

Sprint
The heart of Scrum

- Time-box: One month or less
- Sprints best have consistent durations throughout a development effort.
- A new Sprint starts immediately after the conclusion of the previous Sprint.
- PSPI is created during a Sprint
- During the Sprint:
  - No changes are made that would endanger the Sprint Goal;
  - Quality goals do not decrease; and,
  - Scope may be clarified and re-negotiated between the Product Owner and Development Team as more is learned.

  - Sprint can be cancelled by Product Owner, e.g. when the Sprint Goal becomes obsolete. But, due to the short duration of Sprints, cancellation rarely makes sense.

Sprint Planning
collaborative way to set the plan for a Sprint

- Time-box: 8 hours/one month Sprint

- Event to create the plan for a Sprint, means the work to be performed in the Sprint. This plan is created by the collaborative work of the entire Scrum Team.

- Sprint Planning I: What can be delivered in the Increment resulting from the upcoming Sprint?

- Sprint Planning II: How will the work needed to deliver the Increment be achieved?

- The Sprint Goal is an objective set for the Sprint that can be met through the implementation of Product Backlog and provides guidance to the Development team during a Sprint.

Sprint Review
inspect the increment and adapt if necessary

- Time-box: 4 hours/one month Sprint
- A Sprint Review is held at the end of the Sprint to inspect the Increment and adapt the Product Backlog if needed.
- It's an informal meeting, not a status meeting
- the presentation of the Increment is intended to elicit feedback and foster collaboration.
- During the Sprint Review, the Scrum Team and stakeholders collaborate about what was done in the Sprint.
- Based on that and any changes to the Product Backlog during the Sprint, attendees collaborate on the next things that could be done to optimize value.

Sprint Retrospective
continuous improvment

- Time-box: 3 hours/one month Sprint
- The Sprint Retrospective is an opportunity for the Scrum Team to inspect itself and create a plan for improvements to be enacted during the next Sprint.
- The purpose of the Sprint Retrospective is to:
  - Inspect how the last Sprint went with regards to people, relationships, process, and tools;
  - Identify and order the major items that went well and potential improvements; and,
  - Create a plan for implementing improvements to the way the Scrum Team does its work.

Daily Scrum
Stand-Up

- Time-box: 15 minutes

- Held at the same time and place each day to reduce complexity

- Event for the Development Team to synchronize activities and create a plan for the next 24 hours.

- This is done by inspecting the work since the last Daily Scrum and forecasting the work that could be done before the next one.

- During the meeting, the Development Team members explain:
  - What did I do yesterday that helped the Development Team meet the Sprint Goal?
  - What will I do today to help the Development Team meet the Sprint Goal?
  - Do I see any impediment that prevents me or the Development Team from meeting the Sprint Goal?

Disclaimer

- Information is based on [Scrum Guide™](#) of July 2016

- If you prepare for a Certificate (e.g. Professional Scrum Master), you can take the Open Assessments on scrum.org to see if you are ready or not.
https://www.scrum.org/Assessments/Open-Assessments