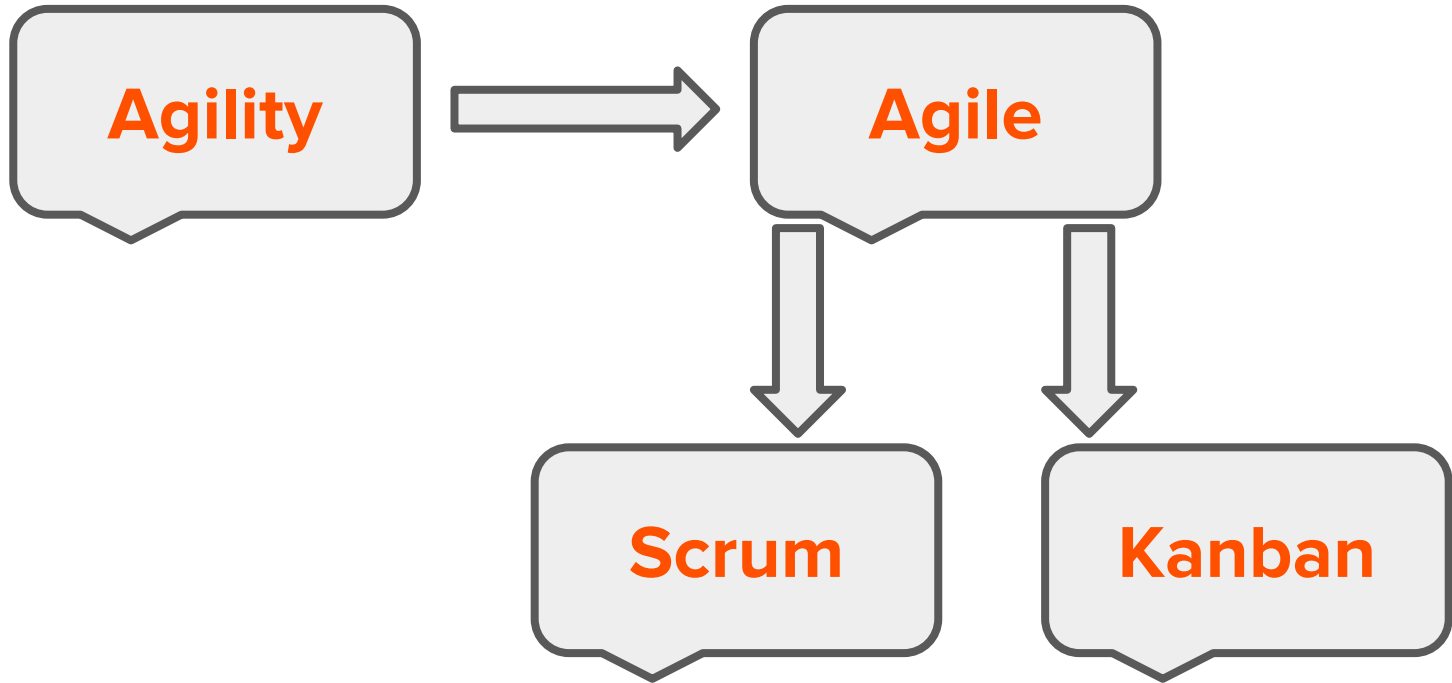# qwinix

Agile Training

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

While there is value in the items on the right,
we value the items on the left more.

Scrum

1. There is a cross-functional Development Team – it has the diverse set of skills necessary to produce "done" product in a Sprint.
2. The Dev Team is self-organizing – it figures out how to get work done.
3. The Dev Team plans its Sprints one at a time, at the start of a Sprint.
4. The Product Owner decides what product needs to be produced.
5. The Dev Team decides how much product to target in each Sprint.
6. The Dev Team's target is shared, clear, and does not change in Sprint.
7. The Dev Team tries to hit the target, but it can over- or under-deliver.
8. Each Sprint is a timebox, and is never extended.
9. The Dev Team aims for "done" each Sprint = tested and defect-free.
10. There is a "Definition of Done," that tells us what "done" means.
11. At the end of the Sprint, we inspect and adapt product and practices.

Sprint
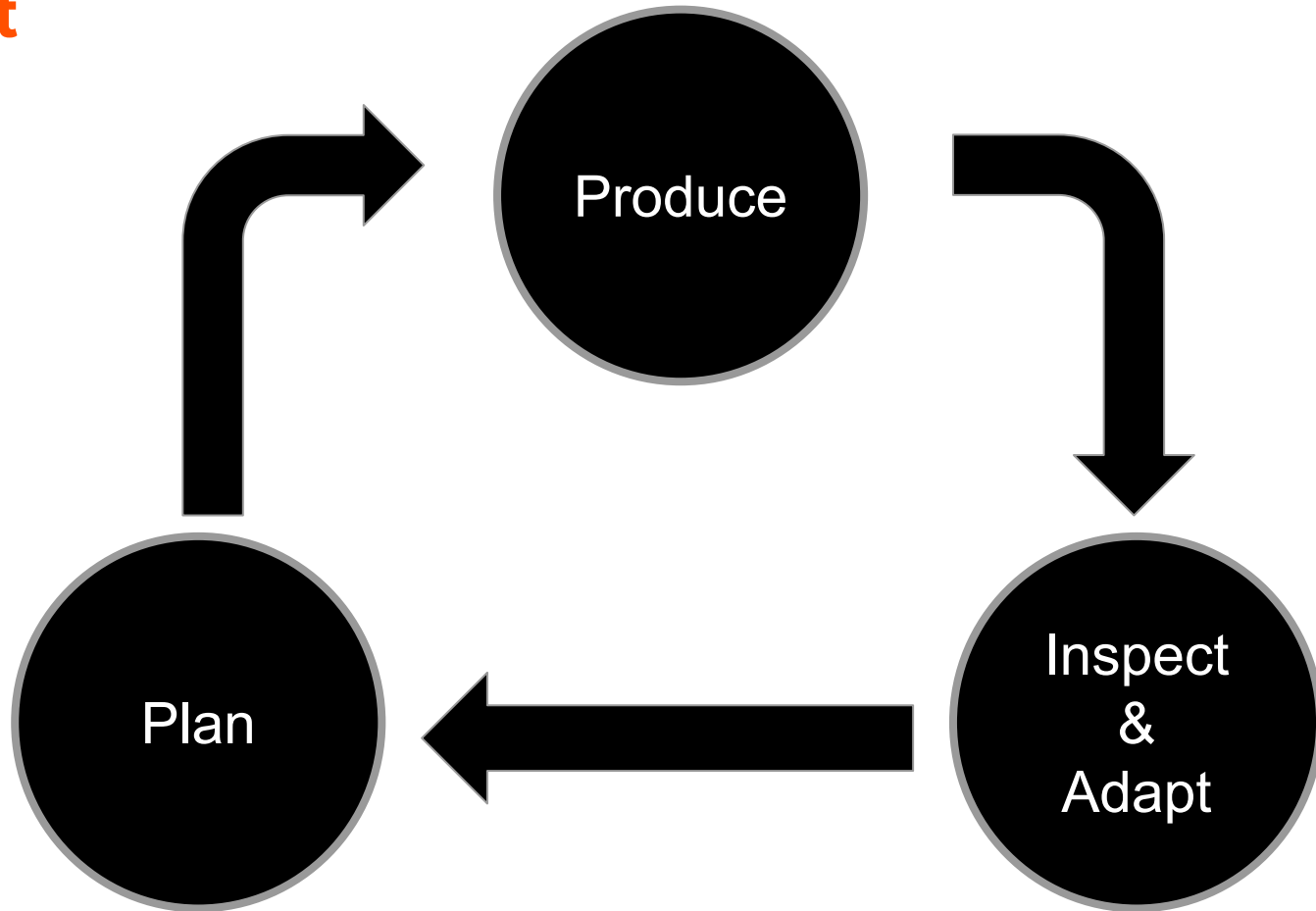
Airplane

Plan

1. During the Plan phase, the Scrum team sits together and plans for the upcoming Sprint.
2. This meeting is called as Sprint Planning meeting. Product Owner, Dev Team are involved in this meeting which is facilitated by the Scrum Master.
3. Ideally, Product owner is present in the meeting to clarify questions and doubts around the requirement. But, in Qwinix, for most of the projects BA/SM gets the requirements from the Product Owner and translates them user stories using the mock up and explains it to the Dev Team.
4. The Dev Team provides their estimation for each story during the planning meeting.
5. The meeting should be timeboxed to 2 * (Number of weeks per Sprint) Hours.
6. <u>This is a forecast, not a promise.</u>

Produce

- A sprint is a time-box during which the dev team aims to deliver a potentially shippable product.
- Daily Scrum / Stand up
- Daily Burndown chart
- Dev Team, Scrum Master and PO

Inspect and Adapt

- Sprint Review : Inspect and Adapt Product
    - Who are involved : PO, Dev Team , Scrum Masters and Stakeholders
    - Meeting at the end of the Sprint (timeboxed to 1 hour x the number of weeks in the Sprint)
    - The PO, SM, Dev Team, and stakeholders get "hands on" with what the Dev Team has produced in the Sprint
        - We inspect the quality, and whether it is "done"
        - We inspect whether it truly serves customer needs
        - We try to find improvements to make in the future (Product Owner adds these on the Product Backlog)
- Get real-world customers or end-users to attend and give hands-on feedback

Inspect and Adapt

Sprint Retrospective :

- Inspect and Adapt Process
- Last activity in each Sprint (timeboxed to
- 1 hour x the number of weeks in the Sprint)
- They create a specific plan of action for improving their practices in the next Sprint
- Probably the single most important practice in Scrum. The Scrum Team does this every Sprint!

Actors - Product Owner

Product Owner is responsible for :

- Has the utmost understanding of the product
- Schedule, scope, and cost.
- Ensuring that the optimal business value is achieved
- Prioritizes the backlog
- Attends stand-up but shouldn't interfere
- PO maintains the Product Backlog, a prioritized list of everything that needs to be done
- PO role should ideally be played by the customer – or someone who deeply understands the customers, stakeholders, or the market's needs

Actors - Scrum Master

The ScrumMaster owns the "3 P's":

- Process Coach
- Problem Solver
- Protector
- The ScrumMaster is a "servant leader", helping the Dev Team and PO use Scrum to achieve the best possible results today, and improve their results in the future.
- ScrumMaster could be a Dev Team member or an ex-Project Manager – but not the Dev Team's boss.

Actors - Dev Team

Dev Team : Recommended size is 5-9 people

- Self-organizing
- Cross-functional
- Responsible for the delivery of the product
- Does size estimation of stories
- Estimation should include TDD effort

Cross-Functional
(Designers, Coders,Testers, etc.)

TDD

Activity

Backlog

Product Backlog :

- A prioritized list of all the functionalities and features maintained by the Product Owner.

Sprint Backlog :

- The Product Owner, ScrumMaster, and Dev Team plan each Sprint at the very start of the Sprint
- The plan they create and the items selected for development for that sprint is known as the Sprint Backlog

Mockups

User Story

C C C :

-   Card, Conversation, Confirmation

Acceptance Criteria:

-   Requirements that have to be met for a story to be assessed as complete.

DoD :

-   A useful subset of the functionality, meeting agreed acceptance criteria and built to an agreed-upon level of quality and "doneness" (the Definition of Done)
-   Each team has its own DoD

Definition of Done

- The Scrum Team (Product Owner, SM, Dev Team) creates the D.o.D. before first Sprint
- It can be changed (but we try to keep it stable to avoid confusion)

Our Team's Definition of Done

The Product Increment is done if it is:
- Code complete
- Code reviewed
- Unit Tested
- Integration Tested
- Acceptance Tested
- System Docs and User Docs updated
- No Priority 1 or Priority 2 defects remaining

Estimation

"Size" = <u>Effort</u> + <u>Complexity</u> + <u>Uncertainty</u>

Actors involved:

- Dev team : Estimate together for the overall size of the item
- Scrum master : Facilitate and clarify requirements
- Product Owner : To clarify requirements

Distributed Scrum Practices

Model 1: Product Owner in US, Dev Team in India

- ScrumMaster should be located with Dev Team in India
- Start with short Sprints (2 weeks or less)
- Dev Team does Daily Scrum during India business hours
- After Daily Scrum, ScrumMaster emails list of blocks to the Product Owner, for assistance clearing
- All real-time meetings between Dev Team and Product Owner should be visual, not just audio
- Standing weekly call for Product Owner and Dev Team, to clear pending blocks, answer questions, etc. (in addition to lots of other interactions via email, etc.)
- Product Owner travels to India for start of first Sprint

Distributed Scrum Practices

Model 2: Dev Team split between multiple locations (for example, half of Dev Team in India, other half in Europe)

- To be effective, team formation must occur
    - Ideally, Dev Team colocation for first Sprint
    - Ongoing "ambassadorship"
    - Multiple forms of continuous live communication
    - If you can't make this investment, may be better to organize them as two different Dev Teams
- Practicalities
    - Daily Scrum live via webcam
    - Scrum Artifacts (Sprint Backlog, Burndown Chart) done electronically, in a shared location

Velocity

1. Velocity is the average of the story points delivered (i.e., accepted) in a certain number of sprints. [(no of story points delivered) 14+12+16/3 (no. of sprints)]
2. Usual the average story points delivered in three random sprints is considered as the Velocity of the team.

-   **Product Owner uses this** to calculate a realistic date for the delivery.

-   Dev Team estimates their velocity using either past history, by doing a Sprint, or by doing a Sprint Planning Meeting.

Burndown Chart

Daily Burndown Chart
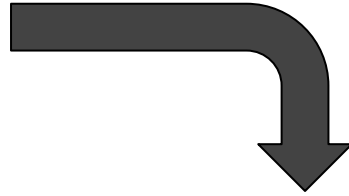
Sprint Burndown Chart
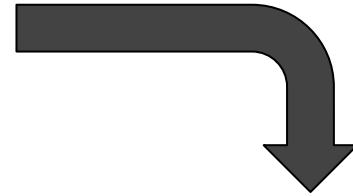
Release Burndown Chart

THANK YOU

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