



- Team is cross-functional and consists of 5-9 people
- There are no set project roles within the team
- Team defines tasks and assignments
- Team is self-organizing and self-managing
- Maintains the Sprint Backlog
- Conducts the Sprint Review

- Accountable for product success
- Defines all product features
- Responsible for prioritizing product features
- Maintains the Product Backlog
- Insures team working on highest valued features

- Holds daily 15 minute team meeting (Daily Scrum)
- Removes obstacles
- Shields the team from external interference
- Maintains the Sprint Burndown Chart
- Conducts Sprint Retrospective at the end of a Sprint
- Is a facilitator not a manager

The diagram illustrates the Scrum process flow:

- Sprint Planning**: Represented by an icon of two people.
- Product Backlog**: Represented by a stack of items.
- Sprint Backlog**: Represented by a single item.
- Daily Scrum**: Represented by a circular arrow icon.
- Sprint**: Represented by a circular arrow icon.
- Shippable Product**: Represented by a box.
- Sprint Retrospective**: Represented by an icon of two people.

The flow is as follows:

- Sprint Planning leads to Product Backlog.
- Product Backlog leads to Sprint Backlog.
- Sprint Backlog leads to the Sprint cycle (Daily Scrum and Sprint).
- The Sprint cycle leads to the Shippable Product.
- The Shippable Product leads to the Sprint Retrospective.
- The Sprint Retrospective leads back to the Product Backlog (indicated by a dashed orange arrow).

- White Board containing teams Sprint goals, backlog items, tasks, tasks in progress, “DONE” items and the daily Sprint Burndown chart.
- Scrum meeting best held around task board
- Visible to everyone

- List of all desired product features
- List can contain bugs, and non-functional items
- Product Owner responsible for prioritizing
- Items can be added by anyone at anytime
- Each item should have a business value assigned
- Maintained by the Product Owner

- To-do list (also known as Backlog item) for the Sprint
- Created by the Scrum Team
- Product Owner has defined as highest priority

- Chart showing how much work remaining in a Sprint
- Calculated in hours remaining
- Maintained by the Scrum Master daily

- Same as the Product Backlog. May involve one or more sprints dependent on determined Release date

“DONE”= Potentially Shippable!

- ***Who decides when a Release happens?*** At the end of any given Sprint the PO can initiate a Release.
- ***Who is responsible for managing the teams?*** The teams are responsible for managing themselves.
- ***What is the length of a task?*** Tasks should take no longer than 16 hours. If longer then the task should be broken down further.
- ***Who manages obstacles?*** Primary responsibility is on the Scrum Master. However, teams must learn to resolve their own issues. If not able then escalated to SM.
- ***What are two of the biggest challenges in Scrum?*** Teams not self-managing, Scrum Master managing not leading.

- Product backlog prepared prior to meeting
- First half – Team selects items committing to complete
- Additional discussion of PB occurs during actual Sprint

- Occurs after first half done – PO available for questions
- Team solely responsible for deciding how to build
- Tasks created / assigned – Sprint Backlog produced

- Held every day during a Sprint
- Lasts 15 minutes
- Team members report to each other not Scrum Master
- Asks 3 questions during meeting
- *"What have you done since last daily scrum?"*
- *"What will you do before the next daily scrum?"*
- *"What obstacles are impeding your work?"*
- Opportunity for team members to synchronize their work

- Team presents “done” code to PO and stakeholders
- Functionality not “done” is not shown
- Feedback generated - PB maybe reprioritized
- Scrum Master sets next Sprint Review

- Attendees – SM and Team. PO is optional
- Questions – What went well and what can be improved?
- SM helps team in discovery – not provide answers

Visibility + Flexibility = Scrum

- **Time Box** - A period of time to finish a task. The end date is set and can not be changed
- **Chickens** – People that are not committed to the project and are not accountable for deliverables
- **Pigs** – People who are accountable for the project's success
- **Single Wringable Neck** – This is the Product Owner!

- A very high level definition of what the customer wants the system to do.
- Each story is captured as a separate item on the Product Backlog
- User stories are NOT dependent on other stories
- **Story Template:**
- "As a <User> I want <function> So that <desired result>
- **Story Example:**
- As a user, I want to print a recipe so that I can cook it.

- A simple way to initially estimate level of effort expected to develop
- Story points are a relative measure of feature difficulty
- Usually scored on a scale of fibonacci numbers 1,2,3,5,8,13,20,40,100 Infinity
- **Example:**
- “Send to a Friend” Story Points = 2
- “Shopping Cart” Story Points = 8

- Each User Story in the Product Backlog should have a corresponding business value assigned.
- Typically assign (L,M,H) Low, Medium, High
- PO prioritizes Backlog items by highest value

- Capacity = # Teammates (Productive Hrs x Sprint Days)
- Example – Team size is 4, Productive Hrs are 5, Sprint length is 30 days.
- Capacity = 4 (5 x30) = 600 hours
- **NOTE:** Account for vacation time during the Sprint!

- The rate at which team converts items to “DONE” in a single Sprint – Usually calculated in Story Points.