



- 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.
- Sprint:** A cycle represented by a circular arrow icon, containing a **Daily Scrum** (top) and a **Sprint** (bottom).
- Shippable Product:** Represented by a green box.
- Sprint Review:** Represented by an icon of two people.
- Sprint Retrospective:** Represented by an icon of two people.

The flow is indicated by arrows: Sprint Planning leads to Product Backlog, which leads to Sprint Backlog, then to the Sprint cycle. The Sprint cycle leads to the Shippable Product, which leads to the Sprint Review, and finally to the Sprint Retrospective. A dashed orange arrow points from the Sprint Retrospective back to the Product Backlog, indicating a feedback loop.

- 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 1-10. 1=very easy through 10=very difficult
- **Example:**
- "Send to a Friend" Story Points = 2
- "Shopping Cart" Story Points = 9

- 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.