

Insights from Scrum: The Art of Doing Twice the Work in Half the Time by Jeff Sutherland

"At its root, Scrum is based on a simple idea: whenever you start a project, why not regularly check in, see if what you're doing is heading in the right direction, and if it's actually what people want? And question whether there are any ways to improve how you're doing what you're doing, any ways of doing it better and faster, and what might be keeping you from doing that." – Jeff Sutherland

All major projects require cycles of execution and improvement called Scrum Sprints. Scrum Sprints are typically conducted bi-weekly, and they contain the following 7 steps:

1. LIST: Create/Update a Backlog List (list document)

- Quickly list or update ALL desirable outcomes for the project.
- Format these outcomes to represent specific points in the 'User's Experience Story': Who (X) + What (Y) + Why (Z) - "As an operator (X), I use the touch screen to start the motor (Y), so I can control the pump remotely (Z)."
- Ensure each item is testable (can be built and tested according to a clear set of pass-fail requirements).
- Sort items in order of their ability to validate critical assumptions AND provide immediate value.

2. ESTIMATE:

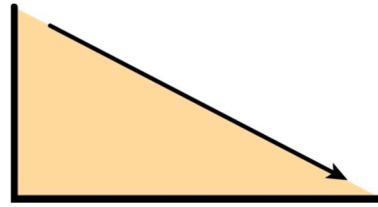
- Part 1: Refine and Estimate Backlog Items (list document with numbers and sections boxed off)
 1. Assign the longest duration item(s) with a 13 (highest Fibonacci number in the sequence: 1,2,3,5,8,13)
 2. Assign Fibonacci numbers 1,2,3,5,8,13 to all items, relative to the hardest item
- Part 2: Sprint Planning Session
 1. Set fixed Sprint duration (time till next evaluation - max 20% of the project duration)
 2. INITIAL SPRINT: estimate points to be completed within that time
 3. SUCCESSIVE SPRINTS: previous Sprint actual point total + 10%

3. POPULATE: Make Work Next Actions Visible

- Write all items that need to be completed during the current Sprint onto cards and put them in the 'DO' column of your Scrum Board (a Scrum board is a wall board with post-it notes OR software program with 3 lists: DO, DOING, DONE – I suggest using the software program Trello.com).
- Move the three top priority items into the 'DOING' column (never have more than 3 items in the DOING column).
- When you complete an item move it from the 'DOING' column to the 'DONE' column.

4. CHART: Make Work Progress Visible

- At the end of each day, take the total number of points in the 'DONE' list and subtract that total from the Sprint total.
- Show the results on a 'Burndown Chart' (a line chart that reduces in value each day, with the y-axis representing the Sprint point total and the x-axis representing the number of day in the Sprint):



5. ASK: Conduct 15-minute Daily Stand-up Meetings

- What did I/we do yesterday to help the team finish the Sprint?
- What can I/we do today to help the team finish the Sprint?
- What upcoming obstacles might slow my/our progress?

6. DEMONSTRATE: Host a Sprint Demonstration

- Invite all project stakeholders (client, management, product owner or potential customer).
- Show the Sprint results (functional products only).
- Gather constructive feedback.

7. REFLECT: Conduct a Sprint Retrospective (lessons learned document)

- What went well?
- What could have been better?
- What can we do differently next Sprint?