

## APPENDIX

### IMPLEMENTING SCRUM—HOW TO BEGIN

Now that you've read the book, here's how to start a Scrum project in a nutshell. This is a very broad stroke description of the process, but it should be enough to get you started. The book was written to give you the *why* behind Scrum. This will, in an abbreviated form, give you the *how*.

1. Pick a **Product Owner**. This person is the one with the vision of what you are going to do, make, or accomplish. They take into account risks and rewards, what is possible, what can be done, and what they are passionate about. (See *Chapter Eight: Priorities* for more.)
2. Pick a **Team**. Who will be the people actually doing the work? This team needs to have all the skills needed to take the Product Owners' vision and make it a reality. Teams should be small, 3 to 9 people is the rule of thumb. (See *Chapter Three: Teams* for more.)
3. Pick a **Scrum Master**. This is the person who will coach the rest of the team through the Scrum framework, and help the team eliminate anything that is slowing them down. (See *Chapter Four: Waste* for more.)

4. Create and prioritize a **Product Backlog**. This is a list at a high level of everything that needs to be built or done to make that vision a reality. This backlog exists and evolves over the lifetime of the product; it is the product road map. At any point, the Product Backlog is the single, definitive view of “everything that could be done by the team ever, in order of priority.” Only a single Product Backlog exists; this means the Product Owner is required to make prioritization decisions across the entire spectrum. The Product Owner should consult with all stakeholders and the team to make sure they are representing both what people want and what can be built. (See *Chapter Eight: Priorities* for more.)
5. Refine and Estimate the **Product Backlog**. It is crucial that the people who are actually going to complete the items in the Product Backlog estimate how much effort they will take. The team should look at each Backlog item, and see if it is actually doable. Is there enough information to complete the item? Is it small enough to estimate? Is there a Definition of Done, that is, everyone agrees on what standards must be met to call something “done”? Does it create visible value? Each item must be able to be shown, to be demonstrated, hopefully to be potentially shippable. Do not estimate the Backlog in hours, because people are absolutely terrible at that. Estimate by relative size: Small, Medium, or Large. Or even better use the Fibonacci sequence and estimate the point value for each item: 1, 2, 3, 5, 8, 13, 21, etc. (See *Chapter Six: Plan Reality, Not Fantasy* for more.)
6. **Sprint Planning**. This is the first of the Scrum meetings. The team, the Scrum Master, and the Product Owner sit down to plan the Sprint. Sprints are always a fixed length of time that is less than a month. Most people now run one- or two-week

Sprints. The team looks at the top of the Backlog and forecasts how much of it they can complete in this Sprint. If the team has been going for a few Sprints, they should take in the number of points they did in the last Sprint. That number is known as the team's **Velocity**. The Scrum Master and the team should be trying to increase that number every Sprint. This is another chance for the team and the Product Owner to make sure that everyone understands exactly how these items are going to fulfill the vision. Also during this meeting everyone should agree on a Sprint Goal, what everyone wants to accomplish with this Sprint.

One of the pillars of Scrum is that once the team has committed to what they think they can finish in one Sprint, that's it. It cannot be changed, it cannot be added to. The team must be able to work autonomously throughout the Sprint to complete what they forecast they could. (See *Chapter Four: Time* and *Chapter Six: Plan Reality, Not Fantasy* for more.)

7. **Make Work Visible.** The most common way to do this in Scrum is to create a **Scrum Board** with three columns: To Do, Doing, Done. Sticky notes represent the items to be completed and the team moves them across the Scrum board as they are completed, one by one.

Another way to make work visible is to create a **Burndown Chart**. On one axis is the number of points the team has taken into the Sprint, on the other is the number of days. Every day the Scrum Master tallies up the number of points completed and graphs them on the Burndown chart. Ideally there will be a steep downward slope leading to zero points left on the last day of the Sprint. (See *Chapter Seven: Happiness* for more.)

8. **Daily Stand-up or Daily Scrum.** This is the heartbeat of



Scrum. Each day, at the same time, for no more than fifteen minutes, the team and the Scrum Master meet and answer three questions:

- What did you do yesterday to help the team finish the Sprint?
- What will you do today to help the team finish the Sprint?
- Is there any obstacle blocking you or the team from achieving the Sprint Goal?

That's it. That's the whole meeting. If it takes more than fifteen minutes, you're doing it wrong. What this does is help the whole team know exactly where everything is in the Sprint. Are all the tasks going to be completed on time? Are there opportunities to help other team members overcome obstacles? There's no assigning of tasks from above—the team is autonomous; *they* do that. There's no detailed reporting to management. The Scrum Master is responsible for making the obstacles to the team's progress, or impediments, go away. (See *Chapter Four: Time* and *Chapter Six: Plan Reality, Not Fantasy* for more.)

9. **Sprint Review or Sprint Demo.** This is the meeting where the team shows what they have accomplished during the Sprint. Anyone can come, not only the Product Owner, the Scrum Master, and the team, but stakeholders, management, customers, whoever. This is an open meeting where the team demonstrates what they were able to move to Done during the Sprint.

The team should only demo what meets the Definition of Done. What is totally and completely finished and can be delivered without any more work. It may not be a completed

product, but it should be a completed feature of one. (See *Chapter Four: Time* for more.)

10. **Sprint Retrospective.** After the team has shown what they've accomplished during the last Sprint—that thing that is “done” and can potentially be shipped to customers for feedback—they sit down and think about what went right, what could have gone better, and what can be made better in the next Sprint. What is the improvement in the process that they, as a team, can implement right away?

To be effective, this meeting requires a certain amount of emotional maturity and an atmosphere of trust. The key thing to remember is that you're not seeking someone to blame; you're looking at the process. Why did that happen that way? Why did we miss that? What could make us faster? It is crucial that people as a team take responsibility for their process and outcomes, and seek solutions as a team. At the same time, people have to have the fortitude to bring up the issues that are really bothering them in a way that is solution oriented rather than accusatory. And the rest of the team has to have the maturity to hear the feedback, take it in, and look for a solution rather than getting defensive.

By the end of the meeting the team and the Scrum Master should agree on one process improvement that they will implement in the next Sprint. That process improvement, sometimes called the *kaizen*, should be put into the next Sprint's backlog, with acceptance tests. That way the team can easily see if they actually implemented the improvement, and what effect it had on velocity. (See *Chapter Seven: Happiness* for more.)

11. Immediately start the next Sprint cycle, taking the Team's experience with impediments and process improvements into account.