



Case 16.1

Introducing Scrum at P2P

PART A

Kendra Hua had worked for six years as a software engineer in the IT department at Point 2 Point (P2P), a large freight moving company. She liked her job and the people she worked with. While she did some maintenance work, she worked primarily on projects, usually full time. Her work covered a wide range of projects including system upgrades, inventory control, GPS tracking, billing, and customer databases. These projects were typically able to meet project requirements but were consistently late. Within the IT department it was common practice for a betting pool to emerge regarding completion dates. The rule of thumb was to take the original schedule and multiply it by 1.5 and start guessing from then on.

Management decided to try to turn things around by changing the way P2P completed IT projects. Instead of the traditional waterfall approach in which all the requirements were defined upfront, the IT department was to start using Agile project management, and more specifically Scrum, to complete their projects.

Kendra had just been assigned to the Big Foot project, which involved developing a system for monitoring P2P's carbon footprint. To prepare for this project, Kendra and her entire team of software engineers would attend a two-day Scrum workshop.

Everyone was given a book on Scrum to prepare themselves for the workshop. At first Kendra was overwhelmed by terminology—Scrum master, sprints, product manager, sprint logs, and so forth. She questioned the rugby metaphor, since the only thing she knew about the sport was that one of her ex-boyfriends in college would come back to the dorm inebriated and bloodied after a match. And why was the project manager called a master? It seemed demeaning to her. Still, she had heard some good things about Scrum from a friend who was using it in another company. He claimed it gave programmers more freedom to do their work and work at a faster pace. So she approached the two-day workshop with an open mind.

The workshop was facilitated by a trainer who was well versed in the world of software development. Participants included her other five team members as well as Prem Gupta, a veteran project manager who would now assume the role of Scrum master, and Isaac Smith, who would act as the product manager representing the interests of the customers. At first everyone gave Prem a hard time, by bowing to him, pleading “master, master, master . . .” The facilitator quickly corrected them by saying he was not their master but rather master of the Scrum process. The facilitator went on to emphasize that they would work as a self-organizing team. Kendra wasn't exactly sure what that meant, but she felt it had something to do with the team managing itself, not Prem.

The workshop covered all the basic Scrum tools, concepts, and roles. Everyone got to practice the process by completing a simulated project involving the creation of a new board game. Kendra liked the idea of the standing Scrum meeting, since most of her meetings at P2P took way too long. She also liked having the product manager, who was the ultimate decider on features and when work was completed. Everyone laughed at the “only one neck to wring” analogy that the facilitator used to describe this role. Overall she thought the process had promise and she was excited about trying it out on the Big Foot project. The Big Foot project was estimated to be completed after five sprints with each sprint lasting four weeks.

THE FIRST SPRINT

The first sprint planning meeting went pretty much by the book. Isaac had done his homework and came to the meeting with a comprehensive list of features the software needed to provide. There was healthy discussion, and Isaac amended the list to include some features that the team felt was necessary. The afternoon session featured Isaac, the product owner, prioritizing the features in the product backlog with feedback from the team. The final segment was devoted to the team deciding among themselves which high priority features they would commit to build within the four-week sprint. Prem did a good job of reminding the team that they were expected to build a fully functional feature. This tempered the team's enthusiasm, and in the end a challenging but doable set of features was assigned to the sprint backlog for the first sprint.

The first couple of daily Scrum meetings were a bit awkward as members were careful not to step on each other's toes. One of the first impediments identified was not having a shared understanding of how a self-organizing team worked. Prem kept emphasizing that it was up to the team to decide who does what and when. Then one morning it just suddenly clicked and members came forward claiming work they felt needed to be done. After that the daily scrums took on a life of their own, interrupted only when a member had to do five push-ups for every minute late. The pace of work picked up, and there was a shared enthusiasm as tasks and ultimately functional features were completed in rapid fashion. Kendra worked side by side with the other software engineers to solve problems and share what they had learned. Occasionally Isaac would be called into the project room to answer questions about specific features and be shown work in progress.

By the time of the first sprint review meeting, the team was able to demonstrate all but one of the designated features to Isaac and even three more that were not on the initial hit list. The team got some useful feedback not only from Isaac but also from a couple of the end users he brought with him. Eighty percent of the features were proclaimed done by Isaac while the others needed only slight modifications. Everyone agreed that the next Sprint review would even be more successful.

The sprint retrospective meeting was refreshing as members spoke candidly about both the good and the bad. Everyone agreed that the team needed to do a better job at documentation. Issues regarding fairness and spreading both the fun work and the tough work among the entire team were brought to the surface. Kendra was impressed by how everyone focused on what was best for the project not just themselves.

THE SECOND SPRINT

The second sprint meeting went well. The features that needed rework after the first sprint review meeting were at the top of the backlog and Isaac made appropriate adjustments in priorities, and a couple of new features that were discovered during the sprint review meeting were added. The meeting convened with the team confident that they would be able to complete the work they had committed to.

Project work progressed quickly over the next week. Kendra felt pressure to accomplish what she said she would at the daily Scrum. At the same time, she felt a tremendous amount of satisfaction reporting work done. The entire team seemed energized. Then one day everything came to a standstill over a sticky integration problem. The team struggled over the next three days trying to solve the problem until, at the next Scrum, Prem stepped forward saying, "I think you should do this . . ." He then proceeded to outline a specific method for solving the problem, even assigning specific

tasks to each team member. During the next two days Prem went back and forth between team members coordinating their work and solving problems. While there was some grumbling within the team, his solution worked, and Kendra was grateful to get back on track.

From then on Prem took a more active role in daily Scrum meetings, often having the final say as to the work agenda for that day. The meetings took on a different tone as members waited for Prem to speak first. Isaac was absent from the project room during this time as he was visiting sites that would be using the new software. Still, features were being completed and Kendra was happy with the progress. Then one day Isaac showed up at the morning Scrum meeting. He had just gotten back and had fresh information he wanted to introduce into the project. He had rewritten the product log and added several new, high priority features and eliminated a few of the features that the team had been working on. He wanted the team to shift their efforts and complete the new features by the end of the sprint.

The team was shocked because one of the principles they had been taught is that you don't change course midway through a sprint. Prem did his best to explain this to Isaac, but he was insistent. He kept saying that these changes had to be made, otherwise much of the sprint output would be a waste of time. He kept repeating that the team needed to be flexible. "After all, isn't that what the Agile approach is all about?" The meeting came to an impasse until Prem came forward with a compromise. The team would agree to do the new work, but the sprint needed to be extended by two weeks. Everyone agreed and Kendra went back to work.

Up till the end of the second sprint, Prem continued to direct project work. When it came for the sprint review meeting four of the five new features were completed as well as most of the original features. However, the feature demonstrations did not go well. Isaac and several of the end users that were present were critical of the user friendliness of several of the completed features. Kendra and other team members defended their work by saying, "Why didn't you tell us you wanted it to perform that way?" Prem did his best to keep the meeting under control, but the team had little to say when an important feature simply did not work. In the end, only half of the features were accepted as being done.

Kendra walked out of the sprint review discouraged. Tomorrow morning was the sprint retrospective meeting. She had a lot on her mind, but wasn't sure what she should say or how to say it at the meeting.

1. How well is Scrum working?
2. What are the issues confronting the Big Foot project?
3. Assume you are Kendra. What would you want to say at the retrospective? How would you say it?
4. What improvements or changes need to be made?

PART B

Prem opened the retrospective by saying he had gotten a call from his boss and she was not happy with the progress. Prem said that he and the team were under the gun to get back on track. The list of things that went well during the second sprint was short and when it came time to discuss improvements there was an awkward silence. Kendra spoke up and began by saying she had gone back and reviewed the Scrum book. She went on to say that she thought the whole idea behind Scrum was that the team was to work to solve their own problems and it wasn't Prem's role to play task master. A

couple of other team members murmured agreement. Prem became defensive and said if he had not intervened it would have taken days for the team to solve the problem.

Another member said he thought it was a mistake allowing Isaac to change the sprint commitments. Prem agreed that in principle that was true, but said sometimes you have to bend the rules to do what is right. He admonished the team by saying that they had to practice being more agile. The retrospective ended with few specific recommendations other than that in order to get back on track, Prem felt he would have to get even more involved in the execution of the project.

The subsequent sprint 3 planning meeting was more of a formality. Isaac updated the product backlog with revised priorities and Prem signed off for the team as to what they would commit to. There was little interaction between the team and Isaac except seeking clarification on performance requirements for specific features.

The team met under Prem's leadership for their daily Scrums. Sometimes the Scrums went beyond the normal 15 minutes as Prem reviewed progress and described in detail what needed to be done that day. Isaac would occasionally show up, change priorities, review work and answer questions. Kendra worked hard on her assignments and often received praise from Prem for work well done.

One evening when the team got together for a few beers and sushi, one of the team members pulled out a spreadsheet and asked who wanted to make the first bet on when they thought the project would be done.

After several sprints, Isaac finally signed off on the last feature and declared the project completed. A collective "yahoo" sprang from the team. After the meeting Kendra went around collecting money from each of her teammates—she had predicted that the project would take 12 weeks longer than planned.

1. How would you assess P2P's effort at introducing Scrum?
2. What challenges does an organization face when adopting an Agile approach like Scrum?
3. What could P2P have done to enhance success?