agile methods....

We're All in This Together

Steve Berczuk, Humedica

Yi Lv, Nokia Siemens Networks

Being agile is hard, and some organizations experience different challenges than others. It's easy to assume organizations with similar cultural backgrounds come to similar solutions, but some organizations choose different solutions than others. In this interview, Steve Berczuk has a conversation with Yi Lv about the change process of introducing Scrum into organizations with different cultural, geographic, and size attributes. They focus on the role line managers and Scrum Masters play in establishing a sustainable Scrum culture. They discover that agile introduction has some universals. —Linda Rising, department editor

teve Berczuk: A few years ago, I was hired on as a technical lead/Scrum Master for a small engineering team based in the Boston area. After working with some Scrum consultants, management decided it wanted to have someone on the team to facilitate the transition to agile. The twist was that part of the team was based in Norway. We colocated for a time, but later on had to manage a distributed Scrum team. What was your organizational context, Yi?

Yi Lv: I have been working in a product development organization in Nokia Siemens Networks, formerly Nokia Networks, since 2002. The organization consists of two sites, one in Hangzhou, China, and the other in Espoo, Finland. In late 2005, we started Scrum pilots on various projects. In 2007, after initial success in our pilots, our entire 500+ person product organization decided to move to use Scrum. As the leader of the first Scrum project in our organization, I was selected to lead one department with about 100 people in the new agile organization and join the leadership team.

Berczuk: Were the people in your organization

excited at the prospect of adopting Scrum? What were some of the key things you did to introduce people to agile methods?

Lv: People were both excited and upset. We identified teams to run pilot projects. Participants in these pilots saw some promising changes as a result of their experience. Those who weren't involved in the practical aspects of the pilot were less impressed.

We also invited gurus like Craig Larman to hold seminars to introduce Scrum, and we trained key people as Certified Scrum Masters. We organized workshops within teams to identify current challenges, to uncover what the change might lead to, and to do practical implementation planning for a transition to agile.

Berczuk: What was the motivation for starting the pilot projects, and at what level of the organization were the pilot projects sponsored?

Lv: Focus and flexibility were the main drivers. We were running parallel projects, and the resulting multitasking caused people to lose focus. Because teams were organized around components, not customer deliverables, we had a diluted sense of customer focus. The combination of a single functional team and component team structure made adapting to change difficult. Because of all these factors, both upper management and the teams were motivated to try different approaches to development, and the agile nature and simplicity of Scrum made it a natural choice to try.

Berczuk: Often when adopting Scrum, you're trying things that upset the comfort level of some in existing management roles. I remember it being challenging to have product management prioritize customer support items rather than interrupting the "sprint" for every customer issue. Having VP-level support for trying different approaches made the transition much easier. Did you face any challenges like this?

Lv: The transition to agile affects not only project management and product management but also people management. I've heard that many organizations have failed to change product management, which is typically a separate organization from R&D. In our case, product management is part of our product organization, with the same boss. We introduced a product owner role and created a PO-centered mode of operation. Since traditional project management is distributed among Scrum roles—PO, team, and Scrum Master—we eliminated most project managers to avoid the dysfunctions due to overlapping roles.

During the transition to agile, we encouraged existing project managers to consider their skills and apply for new roles in the agile model. Some project managers became area product owners (APOs). Others became Scrum Masters, others people managers. Still others chose to leave the organization. Our head of product organization was courageous in making this happen. Many of the former project managers were excited about their new roles.

It was relatively easy to get the support of peo-

ple managers; they didn't feel threatened by this change, since people management is still essential in an agile organization. The challenge was getting people managers to understand the deep change needed to transform their role from command and control to leader and coach.

Berczuk: One of the end states of Scrum adoption is self-managing teams, where team members do the planning. Since this is different from the status quo, you need management support and encouragement to get to this state. Managers need to facilitate rather than actively manage. How did that work in your organization?

Lv: My first task as department manager was to set up teams to enable Scrum development (that is, cross-functional feature teams committing and delivering potentially shippable product increments on a sprint basis) and get Scrum Masters to lead and facilitate the team and Scrum implementation.

We started by sketching the constraints we faced and decided that we needed an appropriatesized team that was cross-functional—able to deliver customer features. We provided training in self-organization and opportunities for teams to get to know each other. Then, we gathered all the participants and allowed them to self-organize into teams. This worked surprisingly well.

We didn't allow the self-selection of Scrum Masters because we needed knowledgeable and passionate Scrum Masters as change agents. We also needed line managers with an understanding of Scrum who could work effectively in this mode. I decided to make line managers Scrum Masters. Where we needed additional Scrum Masters, I recruited.

Berczuk: The idea that self-selection can't extend to the selection of the Scrum Master matches my experience. Since self-managing is key in Scrum, an effective transition needs to be guided by someone who understands the new process deeply, while being able to allow the team room to grow and learn on its own. In fact, I've seen the negative consequences of taking self-selection too far, when I joined a team new to agile and a culture where all change was consensus driven, it was very difficult to establish new practices and develop a good Scrum culture.

Lv: I would prefer not to start with self-selecting Scrum Masters because the understanding of Scrum is typically lacking and the Scrum We started by sketching the constraints we faced and decided that we needed an appropriatesized team that was crossfunctional.

The management aspect of my role made it easier to direct people's efforts and make Scrum a success, but it also caused internal conflict.

Master plays the critical role of change agent. It is too risky to have the wrong Scrum Master. However, once the team internalizes Scrum values, I prefer having an emergent Scrum Master from the team, as happened later in our organization.

After the teams formed, each potential Scrum Master was introduced and led the teams by mutual agreement. To avoid having the traditional authority of line managers possibly subverting the tenets of Scrum, we instituted a rule that line managers could not be a Scrum Master for the team directly under their line.

Berczuk: This matches my experience. In one of my projects, I started as a combination Scrum Master/Manager. The management aspect of my role made it easier to direct people's efforts and make Scrum a success, but it also caused internal conflict. I felt I needed to measure individual performance more than team performance. I think of this whenever I hear that mixing manager and Scrum Master roles is a bad idea.

How did the role of line managers evolve on the Scrum teams? How about the organizational structure?

Lv: We soon found that line managers struggled with balancing the organizational-centric role of line manager and the team-centric role of Scrum Master. The PO decides what, the team decides how, and the Scrum Master supports and enables. The role of the line manager is less clear.

In the beginning, some people in the organization were unclear about the process and skeptical about the change. Urgent escalations from customers demanded immediate attention with little room for mistakes; organizational impediments surfaced and demanded management solutions. Making the transition to self-management required even more management efforts and more leadership.

We moved toward having dedicated Scrum Masters and let line managers lead organizational change and coach Scrum Masters. Their early experience as Scrum Masters enabled line managers to take on a new role in the Scrum organization that was more outward-looking. Line managers became more involved with removing organizational impediments and creating the vision and strategy in organizational evolution. Line managers also transitioned from command and control to coaching. Some new Scrum Masters were recruited within the organization; others emerged from within teams; and others were identified and developed by line managers. Berczuk: How did the interaction between the line manager and Scrum Master role evolve?

Lv: When we had the mixed role of line manager and Scrum Master, we started with a peer group of both. With the evolution toward having more dedicated Scrum Masters, we decided to separate them into two groups. One group consisted of line managers, whose focus was to specify the ends and create the environment for the team to achieve; the other consisted of Scrum Masters whose focus was competence development.

We also implemented Scrum buddies, pairing a line manager and a Scrum Master, to support coaching and mentoring within the organization. Gradually, it led to the creation of an internal Scrum Master community, which later connected to the Scrum community in China. This was essential in getting line managers and Scrum Masters into the mode of continuous learning and growth.

Berczuk: It's often a challenge to coordinate teams when scaling Scrum. Did the Scrum Master group help?

Lv: Not as such. The focus of a Scrum Master group is on their development. It served a coordination purpose to some extent, by spreading good practices across teams. However, we made it clear that the team takes the responsibility of coordinating dependencies across teams in order to deliver product increments in every sprint.

A challenge we faced in team coordination was understanding whether to optimize the team goal or the product goal. Some teams focused too much on their own goals and created strong boundaries, impeding coordination. Great teams work well with other teams, leading to success in achieving product and organizational goals. We concentrated on two areas to change the thinking of Scrum Masters and line managers, who in turn influenced their teams. We created a common goal at the organizational level and kept the big picture visible to everybody. We also removed impediments to collaboration and eliminated incentives to maintain strong team boundaries.

Berczuk: Did you encounter any problems with this change, and how have you adapted?

Lv: Having two separate groups led to a lack of opportunity for Scrum Masters to get involved at the organizational level. A good Scrum Master not only looks at the team, PO, and their interactions, but also at the organization. For their growth, we wanted Scrum Masters to understand the organization. In addition to the line manager's coaching, which could be extended beyond the team context, we created workgroups based on organizational tasks, which would not only solve the problem but also grow Scrum Masters.

Also, because line managers were separated from the teams compared to Scrum Masters, their understanding of the problems the teams faced became poor. Our organization and our department experienced growth, so we increased the number of new line managers, which provided the opportunity to create sustainability in the change. Scrum Masters who had already demonstrated leadership in both team and organization contexts became a good source of candidates. When they were selected as line managers, they continued to serve one of the teams under their direct line as Scrum Master. This supplemented the line management team with good insights. This makes it seem as though we were back where we started, but there were important differences. Early on, the focus was on creating the vision and communication to get buy-in, and removing impediments throughout the organization. Now, the focus is to sustain the change and ensure that it becomes part of the organization. The best way to do this is through the people, particularly those who have influence. Promoting great Scrum Masters to line managers created more consistency between the values and principles behind the Scrum-based organization and the management capability to practice them. As teams became more experienced in self-managing, the original challenge of balancing the line manager and Scrum Master roles became less of an issue.

Berczuk: So you decided to go against conventional wisdom and combined the manager and Scrum Master roles. What do you think made this work for you, and why do you think people suggest avoiding this model?

Lv: Conventional wisdom assumes a conflict between the focus of the manager on command and control and the Scrum Master on leading and coaching. The solution is to separate the roles. I followed this conventional wisdom until I started to think about creating sustainability. Selfmanaging teams are not sustainable if managers retain command and control. When managers change, this conflict disappears.

Berczuk: One thing that strikes me in this discussion is how your experience in a large com-

About the Authors



Steve Berczuk is an engineer and Scrum Master at Humedica, where he's helping to build next-generation SaaS-based clinical informatics applications. The author of *Software Configuration Management Patterns: Effective Teamwork, Practical Integration*, his technical interests focus on software configuration management and agile software development. Berczuk has an MS in operations research from Stanford University and an SB in electrical engineering from MIT, and is a Certified Practicing Scrum Master. Contact him at steve@ berczuk.com.

Yi Lv works for Nokia Siemens Networks in Hangzhou, China. During the past five years, he has participated in a large organizational agile/Scrum transformation as a key driver, leading one of the development areas with a focus on coaching teams and developing Scrum Masters. Lv was the first Certified Scrum Trainer in China. He has actively contributed to that country's agile movement. Contact him at yi_lv@yahoo.com.



pany in China seems similar to my experience working with a smaller team based in Boston. How much does (country) culture versus corporate culture matter when trying to change an organization?

Lv: I didn't experience much difference in trying to initiate and sustain change at the two sites in Hangzhou and Espoo, in terms of change resistance. One difference was that while we disbanded the project manager group, some project managers in Espoo joined the team and worked on product development again; people in China often view this as a step down, to go from project manager to developer/tester, but our colleagues in Finland seemed less bothered with this change as long as they enjoy the work.

In general, I think that there are driving and restraining factors among different cultures, so it's a matter of how to strengthen the supporting factors and weaken the restraining factors.

Berczuk: Any last words?

Yi: Ultimately, sustainability comes from a change in people. Without most of the people making continuous improvement on their own, continuous improvement at team and organizational levels is unlikely.

Berczuk: It's tempting to think that the specifics make it different and cause us to say, "I can't do that." I see enough similarities between your situation and some of my seemingly different experiences that I hope others can see the common lessons to be learned. Thank you! **@**