

# CSM Practicing Certification Renewal Assessment

Name: Mitch Lacey email: [mitchl@microsoft.com](mailto:mitchl@microsoft.com) date: 7/15/2005

Scrum depends on the inspect and adapt mechanisms of process control to manage the complexity of projects. For inspection to work, everyone must know what is being made visible. To implement the Scrum process, such regulating mechanisms as defined roles, involvement versus commitment, time-boxes, and regular cycles are used.

1. Describe one project on which you have used Scrum over the last twelve months. Describe:

- Purpose - what business goal was the project intended to deliver?
  - The objective for IAS RADIUS v1.0 project (code named Falcon) is to consolidate our existing, divergent RADIUS infrastructures into a single RADIUS platform that meets current needs and provides flexibility for future service additions. The overall goals for the current Falcon project are to provide:
    - Simplify our architecture
    - Create an extensible platform to onboard new services without changes to the core platform
    - Create a common code base
    - Improve operational efficiencies by creating a common platform
    - Eliminate any third party dependencies
    - Reduce production server count by 50% or more
- Length - what was the duration of the project?
  - Targeted project length is 11 months (project is currently active and not complete)
- Cost - what were the budgeted and actual costs?
  - This information cannot be shared
- Value - what were the projected benefits and actual (if measured) actual benefits?
  - Several of the projected benefits are listed above. The team believes that it will be able to hit all of these objectives.
- Size - how many people were on the project team(s), how were they organized into teams?
  - There is one project manager, three developers and two testers.
- Team questions –
  - Were the teams cross-functional and self-organizing?
    - Yes, all team members performed all tasks and committed to all work. There are no external forces driving the team.
  - Were the teams collocated in an open space?
    - Yes, the team is working in a shared space, doing paired programming and test driven development.
  - Were the teams physically separated within one location, or located in more than one physical location?
    - No.
- Initiation - how was the project initiated? How was the team trained to use the Scrum process?
  - The project was initiated by using MSN standard project initiation practices. People were informed up front that the scrum process would be used. They had the choice to work on the project or not. The project manager (me) attended certified scrum master training in January. The project manager coached the team for two months before the project actually began in March.
- Reporting - how did you report progress to management and the customers?
  - Reporting is done in two ways. First, the burn downs are printed and posted on the wall outside the team workspace for all to see. Second, weekly stakeholder communication that includes the highlights and low lights of the week, as well as

the burn downs, is sent out to all stakeholders. For our project, management is a key stakeholder and is treated the same as any other stakeholder. We do, however, report on the key findings of the scrum process to management in a monthly report.

- Change - what difficulties were surfaced by Scrum that had to be resolved? How were these resolved?
  - We have had several difficulties, some were surfaced by scrum, and some were not. First of all, the team went through a reorganization. Because of this, we were forced to abnormally terminate one of our Sprint's. The new management did not understand what an abnormally terminated Sprint was. After getting them up to speed, the team moved forward an abnormally terminated the Sprint, with the business need been greater. Second, the team has gone through many resource requests were people just "come by" to grab an expert in a specific area to work on a hot issue. Scrum has forced these requests to be surfaced and has allowed the business to see the constant derailment that occurs in some projects. This has been one of the biggest wins the team has seen in using scrum.
- Management - what was the previous role of the ScrumMaster? Who took on the role of Product Owner? To what degree were they successful in fulfilling their roles?
  - The previous role of the scrum master was that of the development lead. This person has since joined the team in the new scrum master is a project manager. The new scrum master is still fairly green, but with the team having several Sprint's under its belt, is teaching the scrum master what success looks like. The role of the product owners played by a project manager (me). The product owner role has been very successful. The stakeholders are very happy with the new process and enjoy seeing results on a monthly basis.
- Engineering - what software engineering practices or environment had to be changed?
  - The team adopted components of extreme programming. No other engineering practices had to be changed.
- Stabilization - for how long did the software have to be stabilized before it could be released? How did you structure this stabilization process?
  - The team strives to stabilize the code on a daily basis. We've created several automated tools that allow us to take advantage of the additional 18 hours that do not qualify as "working time". Because of this, we are able to identify bugs and problems early in work fast to fix them. During the last five days of each Sprint, the team spends less time developing and more time stabilizing the code.
- Success - to what degree was the project successful? To what degree was the Scrum process instrumental in the success of the project?
  - The project is successful on many fronts. When you have developers and testers say that this is the best code that has ever been written by a group, it says something. The team firmly believes in scrum and extreme programming and has no intentions on using prescribed software development approaches in the future.
- Scrum Process –
  - To what degree was the Scrum process implemented "out of the box?"
    - The scrum process was implemented 100% out of the box.
  - To what degree did you have to modify the Scrum process for this project?
    - The team has not modify the scrum process in any way for this project. It often refers to the rules found in the back of the second book (biker soft press)for guidance.

2. How do you cause the accuracy of Product Backlog estimates to improve? To what degree does their accuracy matter?

3. How do you cause the accuracy of what a team commits to for a Sprint to what the team actually delivers?

- The team finds that the retrospective at the end of each Sprint is a gold mine. It is the three hours and here that helps the team realize it's areas for improvement moving forward. Sprint after Sprint after Sprint, I have seen improvement on what the team commits to. Our first Sprint backlog had 60 work items. This grew to roughly 100 for the second backlog in nearly 300 for the third. This was due to the granularity and constantly factoring of the tasks. The team struggled in the first planning session to even get the 60 work items listed. By the time the team reached its third planning session, it was able to bang out 300 plus work items well within the for our time box or it

4. What metrics do you use to track the development process? Which metrics have been changed, removed, or newly implemented as a result of using Scrum?

- The team tracks several items. These include total hours remaining, hours worked on a specific date, total hours worked to date, total hours and remaining hours, percentage of initial plan that is complete, average hours worked per day, estimated completion date, estimated completion date with regards to earned value, count of work items pending, count of work items in progress, count of work items complete. We also track the variance of in progress work items realizing that we need to keep it low. We track the total plan size and monitor its growth throughout the Sprint. The team did add one additional metric. You may have read this on the Yahoo group, and that is the fourth question of "what is your confidence that we will complete this Sprint?" This is more of a gut check than anything else, trying to weed out any unknowns or fears that people may have but they are not sharing with team. The team finds this beneficial.

5. What type of training, resources, or tools would best help you successfully employ Scrum in the future?

- I would like to see more tools training and resources on how the "the team get things done" part actually works. I know that this will be different for each team, but having an aggregation were summary of what works for other people would be beneficial. I would like to see more training around the role of the product owner, as well as reviews of tools like "scrum works".

**(Optional)** Scrum and Extreme Programming are sometimes used together. What must be considered when this is done?

- First and foremost, the people being asked to work in an extreme programming environment must be bought in to the process. Scrum is a project management process, extreme programming to software development process. If a team chooses, it can do many waterfalls using scrum. It will not find the full benefit of scrum, but it will work. Doing this keeps the familiarity of the prescribed approach while learning the empirical approach. Second, the team must identify what principles of extreme programming it will adopt. The team will need to figure out logistic issues, such as how to get a shared workspace, what hardware may be needed to do paired programming and figuring out if there's enough power in the building to support such effort. Third, the team will need to have management support in using both scrum and extreme programming. If a support structure is not there, regardless of whether or not the team wants to use scrum and/or extreme programming, the project will fail.