

# CSM Practicing Certification Renewal Assessment

Name: Jacqueline Brock Email: Porsche\_gt@bellsouth.net Date: October 12, 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 goal of the project was to replace our existing user security applications with one application which would provide enhanced functionality as well as increased efficiency.

- Length - what was the duration of the project?

This was a six month infrastructure (internal) project.

- Cost - what were the budgeted and actual costs?

The budget funded four full-time team members for six months. However, we only utilized 3 full-time team members for six months and 1 part-time team member for two months. In view of this, the actual costs were lower than the amount budgeted.

- Value - what were the projected benefits and actual (if measured) actual benefits?

The projected benefits were to decommission our old inefficient applications and replace them with a single application which would facilitate a reduction in our SLA timeframes with our customers. The actual benefits were measured and as an example, creating one security level using the old applications took approximately 45 minutes versus 3 minutes with the new one.

- Size - how many people were on the project team(s), how were they organized into teams?

The project team was comprised of the following:

3 – 4 Developers (depending on Project priorities)

1 QA

1 Scrum Master

- Teams - were the teams cross-functional and self-organizing? Were the teams collocated in an open space? Were the teams physically separated within one location, or located in more than one physical location?

The team was cross-functional consisting of front end, back office developers as well as QA. Initially, the team was co-located but as the project progressed, team members were located in more than one physical location. There was a definite loss of productivity as team members had to commute to and from other buildings. This was escalated to senior management; however, due to the rapid growth of new resources, there were space constraints.

- Initiation - how was the project initiated? How was the team trained to use the Scrum process?

The project was initiated by the Product Owner who had obtained the necessary funding for this internal initiative. All team members were required to attend a Scrum overview training class. As the Scrum Master, I attended the two day certification course taught by Ken Schwaber. Reading "Agile Project Management with Scrum" was a pre-requisite for the course.

- Reporting - how did you report progress to management and the customers?

As this was an internal project, the Product Owner was also the customer, who was able to review the burn down at the daily Scrum meetings. The Product Owner also worked with me (Scrum Master) to constantly re-prioritize the Product Backlog and proved to be a valuable asset during Sprint Review meetings. Approximately, every five to six weeks, a progress report had to be given to senior management by both the Product Owner and myself. The report was primarily used by senior management to ensure Scrum methodology was being utilized correctly and to review projected costs versus 'actuals'.

- Change - what difficulties were surfaced by Scrum that had to be resolved? How were these resolved?

Creating a team of self managed individuals was one of the difficulties surfaced by Scrum. The team members would often direct their updates to the Scrum master instead of each other. They were used to having a Project Manager and/or functional manager provide them with their tasks/work assignments. This was very unfamiliar territory, the notion that one had to be self disciplined and perform your own activities as committed to the team. To overcome this, I had to teach the team how to manage themselves. This involved regular reminders to address their updates to each other and not to me, their Scrum master. Sometimes, I would not attend the daily Scrum updates and that forced them to take responsibility for reporting their progress against the Sprint Backlog. In addition, it was reinforced that each member of the team should be aware of what was being worked on by each other. On a regular basis, they needed to compare tasks to ensure all members were in sync with the functionality being delivered for that particular Sprint.

- 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?

Typically, the previous role of the Scrum master was a project manager. However, there were some developers who also held the role of Scrum Master. The role of Product Owner was varied but typically it was someone from the Business who represented the client. The scrum masters who reported to the IT Department seemed to be more successful than those who reported to non-IT Departments. Apparently, those in non-IT Departments were not 100 % dedicated to their scrum team as they had other duties to fulfill. It took some additional training and coaching to break the bad behavior of some of the Product Owners.

- Engineering - what software engineering practices or environment had to be changed?

Initially, the idea was to create collision roadmap which would identify areas of conflict due to the large number of Scrum teams doing development concurrently. However, this never came to fruition. Instead, a bi-weekly meeting was held with the technical leads of each scrum team to identify issues and come up with implementation solutions. In addition, a change management department was created to handle code migrations more efficiently. As part of the changes, Code Reviews became mandatory where as in the past, they were not always enforced.

- Stabilization - for how long did the software have to be stabilized before it could be released? How did you structure this stabilization process?

The length of time for software stabilization varied but that was left up to each Scrum team to work with our change management department to make determination. There was often a period in which UAT was conducted by the client prior to going "Live" and that provided an added layer of confidence.

- Success - to what degree was the project successful? To what degree was the Scrum process instrumental in the success of the project?

The project was successful based on feedback received from the customer who was also the Product Owner. The enhanced functionality as well as improved usability and speed with which items were processed, were just some of the comments that we received about the new security application. The Scrum process was instrumental in the success of the project as it provided a collaborative environment for both the Product Owner and the team. The team also employed some best practices such as Test Driven development to stream line the coding process.

- Scrum Process - to what degree was the Scrum process implemented "out of the box?" To what degree did you have to modify the Scrum process for this project? For each modification, how did you formulate the modification so that the basic inspect/adapt mechanisms continued to function? What parts of Scrum couldn't be implemented, or failed, and why?

Our modifications included a change to the 'Sprint' which was typically an iteration of 30 days but was now 2 weeks to accommodate the fast paced environment of our business. Due to office space constraints, the team members were located in more than one physical location. Since we were not co-located, Scrum conference rooms were created to provide a place to hold Daily Scrum Meeting, Sprint Review, Planning and Retrospective. In view of this, functionality is not presented on the Team member's workstations.

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

- Each QA/Developer estimates their own tasks that they will do
- Provide coaching for customers so they understand that 'estimates' are a best guess and not "set in stone".
- Communicate immediately if we determine the estimate was higher than originally stated.
- Keep a metrics of previous estimates and their 'actuals' to provide a benchmark for the future.
- Utilize subject matter experts for a particular system to provide concurrence on estimates.

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

This is achieved by providing an instrument to track changes, such as the burn down chart, which outline the impacts to the project. Decomposition of the Sprint Backlog is also critical as there needs to sufficient detail which will facilitate accurate tracking of testing and bug fixes. It is important that team members accurately record the hours spent on a particular task so we can compare that to the estimated hours.

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 Burndown Chart, Sprint and Product Backlog are currently utilized as metrics to track the development process. These tools were newly implemented when we switched to the method of agile project management with Scrum. There was not a previous tracking mechanism in place for development from which we could obtain metrics.

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

It would be quite helpful to have regular training courses for team members on how to be self-managed, product owners on how to use Scrum to meet their objectives and scrum masters on Scrum methodology. Also, it would be great to have Scrum Masters periodically visit other practitioners to observe them in their own environment.

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

Not Applicable.