CS250 Final Project

Author Nick R Burnette

SNHU

CS250 Software Development Lifecycle 23EW2

Tammy Morrison

Module 7

ChadaTech Goes Agile

In the evolving landscape of software development, the choice of a suitable development methodology plays an important role in the success of a project. This paper shares my experiences at ChadaTech, a custom software design and development company, as they transitioned from a traditional waterfall methodology to an agile one, specifically adopting the Scrum framework. The focus was on a project for developing an application for SNHU Travel.

The shift towards a Scrum-agile approach is not only a technological shift but also a cultural one, with the goal of getting total buy-in throughout the corporate environment and stakeholders. As the Scrum Master for this project, I will show you how we attempted this and how different members of the team contributed to the success of the SNHU Travel project. I will demonstrate the impact of Scrum-agile approaches, its adaptability, and the effectiveness of its principles, as well as a pro-con list based on my experiences.

# Contribution of Scrum-agile Team Roles to Project Success

Our Product Owner worked closely with stakeholders involved in the project. They were successful at getting a clear picture of their expectations, which became a backlog of User Stories for us to develop. That didn’t mean there weren’t communication issues or clarity issues, but it was a great starting point that minimized such issues.

I was the Scrum Master. I worked closely with the Product Owner and the Development team. I took the agenda of User Stories to our team and held the daily Meetings. This had a daily impact and allowed for little nudges here and there. The team did a great job of being open about their needs or any hindrances, and I assisted in finding the solutions. Mostly I used daily meetings to monitor our course and be on the lookout for obstacles.

Our Developers were good at taking information in bite-sized chunks and running with it. We shared the User Stories, planned our approach, and then went on Sprint. The first few days of each Sprint had the most issues brought up during Scrum Meetings. The last few days we had really found our groove and were able to have a little fun during Scrum Meetings.

We brought in Testers who worked side by side with us. While everyone on the team had the ability to identify bugs, using Testers who were properly trained kept out unwanted surprises and assisted in developing shippable projects along the way.

### Impact of Scrum-agile Approach on User Story Completion

The approach used by ChadaTech allowed for fast production of shippable products. There may have been a slower initial start, but everything we produced was stable and could be built upon. Revisions were simpler, and the end-product was very well developed. Previously we spent much more time at the end of a development’s lifecycle trying to work out issues and bugs. Now, the overall quality has improved. Of equal importance the team seemed to really respond. They are in good spirits and have matured through this process. Previous projects could leave us beaten and battered, often having to go on a death march of sorts to meet project deadlines. The team was ready for more by the end of this.

### Adaptability of Scrum-agile Approach to Project Interruptions

We had an issue where a Stakeholder continued to interrupt our developers. The Stakeholder would go to our Developers for updates and give them new User Stories expecting them to get added to the backlog. This was brought up in our daily Scrum Meeting and I immediately recognized that these were disruptions to our process and needed to be handled through the Product Owner only. I took my concern to the Product Owner, who followed up with the Stakeholders. They established the guidelines that all communication from them was to flow through the Product Owner. This was good for the Stakeholders and also for us because it kept us in a workflow, and it gave them a process of communication.

We also had an issue where SNHU Travel identified a market trend they wanted to be first with. Detox and wellness vacations are a growing category and during production we were asked to make those a priority. Because our sprints are designed to create shippable products that build off each other, it was a simple design change to implement. In our previous methods, we may not have been that flexible and such a request could have been a major setback.

*Effective Communication within the Scrum-agile Team*

This is an area where my position as the Scrum Manager was critical. That is not to say that I managed all communications, in fact one of the important principles in agile is communication from all parties. We needed communication from our stakeholders as well as our developers and testers, not to mention the Product Owner and myself. But while the Product Owner managed the backlog of User Stories, I was the one to help translate needs and progress from both sides. To facilitate this among a team I ended up using JIRA as an Information Radiator. With JIRA we could post every User Story on the digital board, we could give them a date for start and intended completion. This was a nice foundation for the team to refer to, and it was a snap to update as changes were made.

Evaluation of Organizational Tools

JIRA was the primary organizational tool used. Every Developer had their dev stations for production, but this paragraph is focusing on organizational efforts. We also used Microsoft Teams to meet with members who were living abroad and not physically present. But I found JIRA had everything needed to keep the backlog, User Stories, Sprint dates, and anything else that needed to be tracked or organized. JIRA setup is simple with a username and password, and while I needed to spend time learning to use it, my developers only needed access to the information boards. It was very simple and straightforward. I will use JIRA again on future projects as my Information Radiator and project organizer.

Assessing the Pros and Cons of the Scrum-agile Approach

Pros of our transition to Scrum-agile include higher morale. The team never felt like they were working on a failing project or a project that was managed by corporate heads who were out of touch. The communication and buy-in from stakeholders allowed us to be efficient, and the organized sprints kept us on track while providing restful moments in-between. The daily scrum meetings and the retrospectives were good for team building. The other pro was the overall product we delivered being high quality and quickly shippable. The cons are it took a significant amount of work and change to adopt this program. There may have been significant costs sending us all to SCRUM certification and hiring a SCRUM coach. That cost would be a total waste if we weren’t successful, so completion is required. That means the transition is a risk. But with dedication to success, I feel the impending pros are now ready and the cons have been dramatically reduced.

In conclusion, ChadaTech invested in this change and saw it through to the end. They are now better equipped to remain competitive in the future and keep their talent with them. This will no doubt pay dividends on every project they develop for future customers.