Matt Kostandin

Southern New Hampshire University

CS 250: Software Development Lifecycle

November 1st, 2024

**Agile Retrospective**

Throughout our development of the SNHU Travel application, I noticed that the Scrum roles would have played a big part in the project's success. Each role would have had its own contribution to keeping the team on track and delivering. The Product Owner would have provided clear user stories which would help the team focus on the features that add the most. The Scrum Master would facilitate the process, organize sprint meetings, address blockers, and guiding the team to stick to Agile principles. The Development Team collaborate closely. They combine their skills to design and implement features. Each team member would have taken responsibility not just for development but also for supporting testers in creating test cases. This makes sure that the product met quality standards before moving forward. As Schwaber and Sutherland note, "Scrum relies on teamwork, accountability, and iterative progress toward a well-defined goal." I think this emphasis on collaboration and shared accountability was key to help the team to respond and adapt quickly.

I think the Scrum-Agile approach is particularly helpful with user stories. Unlike the Waterfall methodology which is rigid and requires detailed planning upfront Agile focuses on iterative development and is much more flexible. The SNHU Travel project would definitely benefit greatly from frequent inspections, continuous feedback, and focus on adaptability. Daily stand-ups would have been great for tracking progress and identifying challenges early on. During each sprint, user stories would have been completed incrementally. This would allow the team to deliver functional portions of the application on a regular basis. As Beck and company explain, "Agile processes harness change for the customer’s competitive advantage." This adaptability would have been instrumental in making sure that changes in user requirements or unexpected challenges could be handled efficiently without causing delays to the overall project.

Handling interruptions was another area where I think the Scrum-Agile approach would have really shone. There could have been times when changes in direction were necessary. The client could have introduced new requirements midway through development. The flexibility of the Agile framework would have made it easy for the team to refine the backlog and re-prioritize tasks as needed. This ability to pivot quickly would have helped keep the project aligned with the client’s expectations. The team can incorporate feedback and adjust without derailing progress. Sutherland notes, "Scrum embraces change, unlike traditional project management methodologies that view change as a risk to the project." I think this mindset is the key to a team's success.

I believe effective communication was at the heart of the project’s success. Stand ups, sprint reviews, and retrospectives would have helped with this. These regular meetings would have allowed everyone to share updates, voice concerns, and celebrate achievements. For example, during the sprint retrospective exercise, we reflected on what went well and what could be improved, leading to actionable changes in the next sprint. This open dialogue would have ensured that everyone was on the same page and no one felt isolated in their role. They would have got siloed. Schwaber and Sutherland wrote that "Scrum is founded on empiricism and lean thinking," which highlights the importance of transparency.

Tools like Jira would have been incredibly helpful for tracking tasks, visualizing progress, and managing the product backlog. Scrum events like sprint planning and sprint reviews would provide structure to the development process. Making sure that we remained goal oriented. During sprint planning, we would have broken down user stories into smaller, manageable tasks. Then we could focus on specific objectivest. Rubin mentions, "Using a Scrum board or a similar tool helps visualize the workflow, which is critical for tracking progress and managing workload." I firmly believe that having a visual representation of tasks helps identify bottlenecks early and take action.

The Scrum-Agile approach does have both strengths and challenges though. A major advantage of Agile is its flexibility. This approach would have made sure the client's needs were met without major disruptions. The iterative nature also supports continuous improvement through regular feedback. However, there were also some drawbacks. The fast-paced environment sometimes led to scope creep. Additional requirements are introduced without properly adjusting the timeline. Successful delivery of a functional product that met the client’s needs would be proof enough. As Rubin states, "The Scrum framework is particularly well-suited for projects that require frequent changes and client collaboration, making it a preferred choice over traditional methodologies."

The Scrum-Agile approach would have been highly effective for the hypothetical SNHU Travel project. The emphasis on iterative development, open communication, and adaptability would have allowed us to meet the project’s goals while accommodating changes in requirements. The roles within the team would have worked cohesively, and the use of organizational tools would have helped maintain focus and productivity. While there would have been some challenges, such as managing scope creep, I believe the benefits of the Agile methodology would have far outweighed the drawbacks, making it a suitable approach for this project.

**References**

Beck, K., et al. (2001). Manifesto for Agile Software Development. <https://agilemanifesto.org/>

Bossert, O. (2021). The Two-Pizza Team Approach: Amazon's Take on Agile Collaboration. McKinsey & Company. <https://www.mckinsey.com/business-functions/organization/our-insights/how-amazons-two-pizza-teams-work>

Dingsøyr, T., & Moe, N. B. (2020). Research Challenges in Large-Scale Agile Software Development. ACM Transactions on Software Engineering and Methodology. <https://dl.acm.org/doi/10.1145/3372025>

Rubin, K. S. (2012). Essential Scrum: A Practical Guide to the Most Popular Agile Process. Addison-Wesley.

Sutherland, J., & Schwaber, K. (2020). The Scrum Guide. Scrum.org. <https://www.scrum.org/resources/scrum-guide>