Software Development Lifecycle: Final Project

Aaron Bias

Southern New Hampshire University

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Judy Mason, MSIT

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**Sprint Review and Retrospective**

As the scrum master of our small team of skilled professionals that was selected to pilot the agile Scrum framework for our SNHU Travel project, it's important to reflect on the agile principles and processes that took place during the software development lifecycle to understand the successes and challenges it provided. In the following section, I will demonstrate the roles that each team member played in the Scrum-agile approach and how it benefited the SNHU Travel project.

**Scrum-Agile Team Roles**

Our small team consisted of Brian (Tester), Nicole (Developer), Christy (Product Owner), and myself (Scrum Master). Everyone played a crucial role in the success of the agile Scrum framework pilot for Chada Tech.

* Brian (Tester) worked closely with Christy (Product Owner), ensuring that the test cases evaluate the needs outlined by the user stories. He helped identify ambiguity in the user stories and developed scenarios to meet the acceptance criteria which ensured our team would deliver the desired product. Brian’s contributions were instrumental in the development of the SNHU travel project.
* Nicole (Developer) brought the user stories to life and was quick to adapt to changing demands when Christy updated us on the changing requirements of our client. Nicole embraced the agile manifesto and was pivotal in the success of the project.
* Christy (Product Owner) played a pivotal role in the direction of the project as she maintained a clear and prioritized backlog, kept the team aligned with the changing requirements of our client, and was instrumental in maximizing the value of the product and the work our team did.
* Me-Aaron (Scrum Master) facilitated the Scrum events and maintained open communications. I was instrumental in removing obstacles, championing agile principles, and making sure Scrum events ran smoothly. I practiced servant-leadership for my team, making sure they understood which interactions are helpful and which aren't, ultimately increasing the value our Scrum team provided.

**Scrum-Agile Approach and User Story Completion**

The Scrum-agile approach to completing user stories allowed us to adapt to changing requirements and provide incremental progress which allowed us to receive feedback from key stakeholders. User stories were created with clear acceptance and fail criteria which fostered a clear goal and understanding to all the team members. One example of why the agile approach helped completion of the user stories was the shift of focus on Wellness and Detox vacation destinations our client wanted to pivot towards in the product. When Christy brought that information to us, Brian was able to update the test cases to align with the new focus while Christy updated the prioritization of the backlog so that the project stayed on schedule. This approach allows us to make necessary changes promptly. Scrum event (Sprint Planning, Daily Scrum Meetings) provided us with additional opportunities to discuss and refine user stories to meet the requirements of our client. This approach allowed us to deliver incremental progress on user stories, making sure each sprint was successful and valuable.

**Scrum-Agile Approach to Changing Demands and Interruptions**

One key agile manifesto value that was published in 2001 states that “Responding to change over following a plan”. This statement couldn’t be more relevant in the context of our SNHU Travel project. The Scrum-agile approach provided us with the framework (which is also adaptable to the needs of the project) to navigate the changing requirements of the project discussed earlier. The client wanting to change focus on destinations packages would have been a headache for our waterfall approach, but the agile approach allowed us to come together as a team, realign our focus to the new prioritizations on backlog items provided by Christy, adjust our sprint planning, collaborate on the changed user stories and begin to deliver progress on the realigned user stories.

**Scrum-Agile Effective Communication**

According to Charles Cobb, agile processes generally depend very heavily on empowered people making intelligent decisions and the power of collaborative work (Cobb, 2015, p. 22). The most effective way to empower people and foster a collaborative work environment is communication. Throughout the SNHU Travel project, effective communication events and tools that fostered the environment were:

* Daily Scrum Meetings: These short meetings provided the team with an opportunity to share their progress and obstacles. These meetings were structured to answer key questions that would ensure the team members were collaborating with each other to address any challenges and obstacles. It also created a culture of transparency and accountability within the team, ensuring we stayed on track to accomplish sprint goals.
* Information Radiators: The visual representation of our project progress, backlog items, user stories, and sprint goals ensured everyone had prompt access to critical information in real time and could see progress from other team members. This tool allowed team members to focus on what needed attention. Information radiators also promoted transparency and accountability.
* Structured Discussions: Forums was another tool that was used to foster collaboration, it allowed team members to have focused discussions on a specific subject or issue. It promoted visibility and accessibility, aligning with the agile principle of open and transparent communication.

**Scrum-Agile Principles Evaluation**

The success of the SNHU Travel project relied on the effectiveness of our Scrum events and organization tools. The following points outline the Scrum events and their effectiveness in ensuring the project’s success.

* Sprint Planning: This collaborative meeting focused on setting clear goals and objectives for the upcoming sprint. This ensured everyone is aligned on what needed to be done.
* Daily Scrum Meetings: These daily meetings play a crucial role in ensuring everyone is informed about each other’s progress and any obstacles they encounter. This agile practice ensures everyone is on the same page and issues are addressed promptly.
* Sprint Review: This event allows the Product Owner to inspect the sprint’s work for review and approval. This event encourages feedback from all stakeholders, fostering team and customer collaboration, a key agile principle.
* Retrospective: This event allows the team to inspect the result of the last sprint for opportunities and improvement. Aligning with agile principle of responding to change over following a plan. This is great for continues improvement and adaptability.

The organizational tools and their effectiveness are just as important in the project's success and are outlined below.

* Information Radiators: The visual representation of key items in real time is highly effective in promoting visibility and transparency, which is essential for agile practices. This tool allows team members to see and update progress on key items to keep the project moving forward. This tool is effective in promoting collaboration as it removes obstacles (If you use digital tools) of remote teams and promotes communications on key items.
* Structured Discussions (Forums): This optional tool provided another avenue for our team members to have focused discussions on key topics. The platform allows team members to share ideas and insights to key topics which align with the agile principle of customer collaboration and responding to change, as it allows feedback and adaptation.

**Scrum-Agile Assessment**

The Scrum values of commitment and focus, openness, respect and courage are very much in line with the core four values of agile (individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation and responding to change over following a plan). The adaptability of the Scrum framework allowed my team to pivot quickly to align with SNHU Travel’s new focus of Wellness & Detox vacation destinations. The tools provided within the scrum framework empowered everyone to deliver value to our client SNHU Travel and Chada Tech. The challenges of switching to a Scrum-agile environment is everyone on the team is stripped of titles and simply go by “Developer”, this approach is to prevent “specialists” and promotes learning and training (and collaboration) and can be a difficult learning curve for some. Another con of the Scrum-agile framework is it require active participation to be effective, a key success of a Scrum team is collaboration and empowerment, if no one is participating in these events or using the tools, it will hinder the success of the team. The overall success of the SNHU Travel project was due to the Scrum-agile framework as we were able to adapt to changing demands and align all team members' focus on key items to meet our client's needs. The value we delivered to SNHU Travel and our company Chada Tech, makes it an excellent choice for projects in the future.

References

Cobb, C. G. (2015). *The Project Manager’s Guide to Mastering Agile: Principles and practices for an adaptive approach*. John Wiley & Sons.