SNHU Travel Sprint Review and Retrospective

SNHU Travel began as an application developed to sell and recommend travel packages to consumers. The application was developed by ChadaTech where we used this project to experiment with agile methodology before shifting the organization to agile practices. Throughout development, user stories and stakeholder input caused a shift in functionality and core application design. Our new scrum-agile approach allowed the team to continue development while incorporating the requested changes by having an organized, adaptable approach, strong communication, and adaptability throughout the entirety of the team.

Each role in our agile team held a significant role in ensuring a smooth development cycle where not only was the end-product impacted positively, but the team grew as individuals and as a unit. Our product manager was pivotal in communicating the product vision throughout the process as well as incorporating user stories and stakeholder input consistently throughout each sprint. Input was broken down into smaller tasks and incorporated into the backlog using the affinity model in backlog refinement meetings. This approach allowed developers to have a direct impact on the workload of the next sprint by allowing the development team to assess the difficulty and time requirements of tasks and overcome disagreements by collaborating as a team. As the keeper of the vision, the product manager was the liaison between the users, stakeholders, and the development team. Our product manager ensured the final application met/exceeded all standards set by the client while maintaining a consistent but acceptable workload throughout each sprint.

Our Scrum Master (me) was a pivotal keeper of the culture while simultaneously ensuring meetings were focused, inclusive, and structured. For SNHU Travel, we implemented several consistent scheduled meetings including daily scrums, sprint planning, backlog refinement, scrum review, and scrum retrospective. Each meeting had a different focus, and my role was to maintain focus on the goals of each meeting while enabling an inclusive culture. For example, the daily scrums were 15-minute meetings where each team member answered three questions: What was accomplished yesterday? What will be accomplished today, and what barriers do you foresee? Following a consistent format and requiring input from all team members allowed the team to become comfortable with the format quickly and enabled team members to have open, honest communication which empowered the team to overcome obstacles collaboratively. These meetings ensured the team was aware of the current state of each task and their goals for the day. Enabling the team to work together to overcome roadblocks not only facilitated honest communication, but it allowed individuals to grow and learn new skills from developers who possess that skillset. It also ensured the team remained adaptable day-to-day which allowed development to remain on schedule for the current sprint.

The development team was the core component of the team that built the functionality of the project. The key components that contribute to success in a good development team are communication and adaptability. In SNHU Travel, the development team was key in breaking down tasks for backlog refinement. With their input, our product manager was able to sprint plan effectively to maximize production during each sprint without overwhelming or underworking the team. Our production team was also capable of working together to overcome roadblocks discussed in our daily scrum. SNHU Travel had a large shift in core functionality during development where the stakeholders decided to primarily focus on wellness packages. Our team was able to adapt quickly to break down new tasks in backlog refinement and begin implementation and refactoring in the following sprint. This quick reaction to a large change was only possible with a team that functioned as an honest cohesive unit that overcomes challenges collaboratively in daily scrums.

The testing team was a key component to ensuring functionality is thoroughly vetted for errors and security concerns. In SNHU Travel, it was imperative that the testing team have communication lines with the product owner. For example, the testing team needed to know if the goal for their system is to display a top 10 or top 5 travel packages for boundary testing. This is just one example of many limits that a testing team needs to know for accurate testing. Communication with the product owner was key as testers need to know the specifics of data so they can test accurately. This information comes from the product owner via user stories, stakeholders, or the product owner’s vision.

In an agile approach, the product owner is responsible for obtaining user stories and feedback. Those stories are then used to add new functionality or refactor existing functionality to better incorporate the needs of the end user. In SNHU Travel, the user stories we obtained suggested functionality that recommends packages based on a user’s profile and purchase history, allows users to sort by vacation types, and to display top 5 destinations list. Those stories were then broken down in backlog refinement to determine their priority, value, and criteria for acceptance. In SNHU travel, this was done in conjunction with the development team using the affinity model. Once tasks were broken down, prioritized, and agreed upon, they were assigned in sprint planning so implementation and testing could begin quickly.

The Scrum Agile approach was crucial in allowing the team to adapt to changing goals in development. Although many minor alterations occurred throughout development, the stakeholders communicated a large change to the fundamental design of the project that caused a large change in the functionality of the entire application. In the early development stages, the goal was to sell packages of all types. Our stakeholders received information that wellness vacations were predicted to see booming growth and the decision was made to shift focus to wellness packages which caused a need for a large-scale refactor of the system. The agile approach allowed for the tasks to be broken down and prioritized quickly with the input of developers. In the following sprint planning meeting, new goals were set, and tasks were assigned to begin development on the changes almost immediately. With the product owner setting new goals that incorporated the change in functionality, we were quickly able to pivot the project while simultaneously limiting the amount of code loss by reusing as much code as possible.

When tasks are added or changed in an agile approach, the goal is to react quickly to begin implementation while also limiting waste of time and resources. Agility facilitates this by allowing the project to change while development is ongoing. Since functionality is being broken down into smaller tasks, new tasks can be added and assigned quickly to begin production of the new features. Depending required changes, it is possible that some code has been created that needs to be scrapped but since tasks have already been broken down, the loss of code is minimal. It’s far more likely that functions can be refactored to adapt to new functionality. In SNHU travel, the project was initially developed to sell various types of vacations. When we pivoted to wellness travel, we simply had to refactor some of the functionality to display only wellness packages instead of various types of packages.

Throughout development, it was imperative that I communicated effectively with the team. The following are examples of communication during development:

Good afternoon Project Manager,

The user stories have been a critical insight into functionalities our users expect. I would like to expand on some technical requirements that you have in your vision for this project.

-When recommending packages to users, how heavily should we weigh the results between their profile interests and their sales history or trending packages?

-When displaying results, are we looking to limit results are have multiple pages that will eventually display all results?

-Will there a be limit to types of vacations? This is a broad attribute and could require a UI overhaul if too many exist.

-Are we forcing users to fill out interests upon account creation?

-Are we factoring in package reviews or simply sales? There are edge cases where packages may sell due to price but fail to deliver in user satisfaction. Would we still promote these?

-Are we looking to expand into an app in the future? Optimization and responsiveness could be implemented early on for a smooth development cycle.

I’m free this week after daily scrums for a meeting.

Best regards,

Jonathon Smith

This email is short and bulleted for easy reading with a follow up statement after each question for validation and potential impact. Offering a meeting with open schedule times skips the most likely case of a response to this email being “when are you available for a meeting?” Personally, I don’t believe the questions asked in this email are necessarily that important if a meeting is planned. It’s unlikely that a response would occur that answers questions unless they are urgent. It’s more likely that a meeting is scheduled, and my next step would be to prepare for the meeting with a team meeting to form a more expansive list of concerns.

Good afternoon Project Manager,

The recent changes to SNHU Travel are an exciting adaptation that is sure to be a cutting-edge player in wellness travel! After our recent meeting, the team needs clarification on a few points to build the vision you have presented.

-Is the system exclusively featuring only wellness/detox packages?

-Are we scrapping previous functionality or adding functionality to support wellness/detox packages?

-Do we have user stories to expand functionality regarding wellness packages?

I think adding a focus on wellness packages while maintaining currently implemented functionality is a strong plan to consider. This allows the system to take advantage of the upcoming trend while also maintaining functionality that applies to a larger user base. This would also allow the primary focus of the system to shift if trends in travel also shift.

Let’s plan a meeting to discuss. I am free any time after our daily scrums.

Thank you,

Jonathon Smith

The goal of this email was to bring up some points of clarification while also adding my own ideas and reasoning. The goal isn’t to start a long email chain but instead to plan a meeting. I also include a wide time frame that I would be available for a meeting.

Dear Tester,

As we shift the system to a focus on wellness travel, we are currently unclear on the total vision of the new system. As we plan meetings throughout the week, we should continue to test prior functionality in addition to the newly added wellness focus. We will continue to update as information is received.

As we begin this shift, what are your concerns and questions? What do you need from us to help make this transition smooth? I am planning a meeting with the product manager this week. Would you like to meet beforehand and/or attend that meeting?

Thank you,

Jonathon Smith

This email was composed as an update to the testing team to acknowledge a current lack of details and a plan of action. More detailed information is required from the stakeholders to provide a complete vision. The goal is to communicate with the testers to receive a list of their concerns to discuss in a meeting and extend an invitation if they would prefer an in-person meeting.

Throughout the development cycle, the team used many tools to facilitate agile practices. During Sprint Planning, the team used JIRA to prioritize user stories and tasks based on their importance and urgency. This tool facilitated a clear understanding of what needed to be accomplished in the upcoming Sprint and helped in setting realistic goals. The tool’s visual boards and tracking capabilities allowed the team to have a complete view of the project's progress. For Daily Scrums, the team utilized Slack for quick, synchronous communication. This tool was essential in maintaining open communication and collaboration, as team members could promptly address and resolve roadblocks. The platform’s integration with project management tools also enabled the team to stay updated on task progress. The use of CI/CD tools (Jenkins) was critical in Sprint Reviews. Jenkins allowed the team to deploy the latest version of the application for review quickly. This facilitated real-time feedback and enabled the team to demonstrate current progress, making the review sessions more productive and focused on product improvement. In the Sprint Retrospective, the team used FunRetro to collaboratively discuss what went well and what could be improved in our agile process. This tool provided an anonymous and safe space for team members to express their thoughts, leading to more honest and constructive feedback. The visual nature of the tool helped in categorizing feedback and making action plans more available and trackable.

The change to agile practices offered many pros and cons in the development of SNHU Travel. The Scrum Agile approach allowed for flexibility and adaptability to accommodate the changing requirements from the stakeholders and users. The increase in collaboration and communication allowed for better alignment on team goals and greater individual impact on the project. Continuous feedback from both stakeholders and users allowed the system to adapt to changing requirements and produce a better product in a shorter time span. My personal favorite aspect of agility is continuous improvement. The team’s input during sprint retrospective allowed for processes to improve by incorporating team feedback.

Although the pros far outweighed the cons, there were challenges regarding the change to agile development. There’s an initial learning curve and culture change that will not be easy for most teams. Team dynamics must be strong to facilitate a collaborative and self-organizing team. Client and user involvement is a necessary component to receive feedback and impact the system. Product managers and scrum masters have crucially important roles. Since these roles are typically assigned to one person, it's crucial that they are committed and execute their roles. Failure in either of these roles will deconstruct the agile process leading to hectic sprints, poor product vision, improper communication, and culture issues.

The agile approach was the correct approach for the SNHU Travel project. The clients and users were active in giving feedback and the product manager and scrum master were engaged in their roles. When developing SNHU Travel, it wasn’t a perfect experience, but continuous improvement fostered team growth with each sprint. The agile approach allowed the project to pivot quickly to changing goals saving time and money while contributing to a better product for the client. If the team buys in to the agile manifesto and development is centered around communication, I don’t see a circumstance where agile development won’t benefit development for any project.