

CS250 Final Project

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The transition to a Scrum-agile methodology was a strategic move by ChadaTech to enhance our project development process. The waterfall method would have delayed the project significantly, as we would not have been able to adjust to feedback as quickly or easily. This shift, aimed at increasing adaptability and improving stakeholder engagement, positioned us to better meet the dynamic needs of our clients, particularly for the SNHU Travel project as that is what we were assigned. Through this approach, we embraced a culture of continuous feedback and iterative development, setting a strong foundation for project success. There were three times that we sought customer feedback during the project. This foundation is accepted as one of the best methods in project development. Creating an atmosphere of communication, and adjusting the project to make it more towards the clients needs.

Role contributions, the effectiveness of our Scrum-agile team was rooted in the distinct contributions of each role. The Product Owner acted as the liaison between the client and the development team, ensuring that the project's vision and goals were clearly communicated and understood. The product owner is one of the most important roles, as they truly need to understand the client's ideas. Their ability to prioritize the backlog according to business value and stakeholder feedback was and is crucial. During this project they met with the clients several times to get information to the rest of the team. As the Scrum Master, my role involved facilitating the Scrum process, removing impediments, and promoting an environment conducive to team collaboration and high performance. The Scrum Master is another major important role in talking about needs and requirements, as they will be the primary members making sure the goal and tasks are adherent to the goal and tasks of the mission. Setting goals for project

completion was a crucial part for our travel agency. The Development Team's commitment to technical excellence and collaborative problem-solving allowed us to deliver functional increments that met our stakeholders' needs. The development team is exactly that, they specialize in developing the client's ideas. They are often small teams, sometimes getting over 100 people, but most projects are between 8-20. For this project the development team went piece by piece to take the code that we already had for the project to include all the clients ideas, and bring them into fruition.

Our scrum-agile approach to the SDLC was characterized by flexibility, adaptability, and a focus on delivering value early and often. This also helps manage the clients expectations, and gives them a chance to provide guidance early. We broke the project down into manageable sprints, allowing for regular reassessment of priorities and the incorporation of stakeholder feedback into subsequent iterations. This approach not only ensured that the final product was closely aligned with user expectations but also allowed us to efficiently manage changes without significant disruptions to our project timeline. In a waterfall method like was previously used, we would have never been able to have such adaptability. We also used the agile method to apply the feedback from the clients. During our first sprint, and our second sprint feedback was adjusted, subsequently, our product was as well.

Communication within our team and with stakeholders was facilitated through various agile practices. Communication is the heart of the agile process. The role of the Scrum Master is also unit cohesion, and communication is key in facilitating a healthy open atmosphere. Daily stand-ups provided a platform for team members to report on their progress, identify any challenges, and plan for the day ahead. Daily Standups, and Sprints can help with communication, and organized communication. This open communication culture is instrumental in maintaining alignment on project goals and facilitating quick decision-making. This method

also created a way for the team to constantly be on the right path, and avoid any potential wastes of time. Wastes of time is one of the greatest risks with the waterfall method.

The adoption of agile project management tools like JIRA enabled us to track progress, manage the backlog, and visualize work through Kanban boards. These tools provided a transparent overview of the project's status at any given time, facilitating better planning and resource allocation. Scrum principles, such as empirical process control and self-organization, guided our approach to project management, allowing the team to adapt to changing requirements and leverage their collective skills and knowledge to overcome challenges. Jira assists in several scrum events like Daily standups, and sprints. Jira can help keep everyone on the same page, and with the same timeline.

The Scrum-agile approach presented several advantages, including improved stakeholder satisfaction through continuous engagement and feedback incorporation. The iterative development process allowed for early detection and resolution of issues, reducing risks and ensuring a higher quality product. However, we also faced challenges, such as managing the scope within the confines of fixed sprints and ensuring all team members were fully versed in agile practices. Another con, was the Agile approach could have been difficult because of the lack of documentation. In an agile method, things are much more streamlined, and word to mouth. Despite these challenges, the benefits of increased flexibility, enhanced team collaboration, and the ability to adapt to changing project requirements affirmed that the Scrum-agile approach was the optimal path for the SNHU Travel project.

Reflecting on the SNHU Travel project's journey, the Scrum-agile methodology has proven to be a powerful framework for managing complex software development projects.

Through its emphasis on collaboration, continuous improvement, and responsiveness to change, we delivered a product that not only met but exceeded stakeholder expectations. Our experience reinforces the value of adopting agile practices across ChadaTech to enhance our capabilities in delivering high-quality software solutions in an increasingly dynamic and competitive market.