Gerardo Gonzalez

Southern New Hampshire University

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Each role in a Scrum-Agile Team plays an important part that contributes to the success of a project. You can see this in the SNHU travel project, this team had four primary roles Product Owner, Scrum Master, Developer, and Tester. In my experience as the Product Owner, this role contributed to the project by serving as a bridge between the customer and scrum team and helping the team with the initialization and direction of the backlog. The backlog is often used as a foundation that the team uses to begin and sprint development which is overseen by the product owner in all stages of development. This helps keep the backlog clean and accurate for the rest of the team.

The next role is the Scrum Master who can be seen as a team leader. The Scrum Master is responsible for helping the Developers and Testers by addressing any issues that they might have. Typically, the scrum/agile team attends what is known as stand up which is a brief meeting that helps all the members of the team communicate and address the workload for that day, the scrum master listens to the team and tries to correct any issues or impediments that the members have within the team. All the information that is shared within the team is also managed by the Scrum Master this form of communication and information helps the rest of the team become self-organized. The Scrum master also works very closely with the product owner because any information that is shared by the Product Owner is then passed to the Scrum Master who then shares it with the rest of the team during stand-up meetings.

Next is the Developer Role this role which focuses on developing the user stories within the team. The developer contributes to the project by taking in those user stories which are features that the client would like to have in the project. From my experience as a developer in this project, I have noticed that this agile/scrum team encourages self-organization while also encouraging the rest of the team to develop a variety of skills. Another benefit of agile as a developer was the ability to step back and work on previous stages of development such as week five of the SNHU project which we discussed later on.

Testers also have a similar role compared to developers the main difference between them is that the testers are responsible to make unit tests so that the products from the developers are in the range of what is considered done. Their contribution to the project helps the team by analyzing and testing the code that the developers made, from there they set standards and test the functions and compare the results to the user’s stories to make sure that the end products meet the client’s standards.

How the scrum/agile approach helps to complete the user stories, is by taking a different approach to that of a waterfall approach. One way this is done is in the planning phase of the project. For example, in the planning phase of projects the team would typically take a large amount of time to try to plan every single stage of the project typically led by a project manager, this sets specific requirements that the team must accomplish in order to proceed to the next stage. The issues I saw from this approach are long release dates, bottlenecks if multiple teams are involved, and the members of the team tend to have specialized roles or disciplines for specific tasks. These create faults in the approach in the form of delayed lunches, miscommunication with multiple teams, and team efficiency if changes are made to the requirements.

But the Scrum/Agile approach solves these issues by letting the teams construct a more forgiving planning process that gives the project some adaptability, one way this is done is by utilizing agile estimation practices, and another is the utilizing of story points from the user stories. This approach first helps produce a much quicker and more accurate deadline. Another way is by letting each team in a multiteam project work independently from one another. Finally, it lets the members of the team achieve their goals by encouraging members to work and learn multiple skills and creates a more efficient team.

The deadline will ultimately not be 100 percent accurate because of the interrupts that can occur. These interruptions are typically in the form of client changes or new requirements, which is when the client wants to make a change to the features or priorities in a project in some aspect of the development phase. The changes then will shift the priorities in the backlog and set a different direction that the team will need to adapt to. In the old waterfall approach, these changes would take up a significant part of the project and delay the release of the project some changes might not be even possible. With the agile approach, we can adapt to these changes and even go back to specific stages to make this work. One experience that I had was a change in direction from week five. During this stage, the team was introduced to a new requirement. The product owner discussed with us how the customer wanted to focus on making a feature in the SNHU travel project that would make the booking tool focus on detox or wellness travels. With the Scrum/Agile approach, the team was able to go back and change the list of the destination which would display detox and wellness trips compare to what it was before which was listing trips based on the application’s most popular destinations.

The ability to communicate with other members of the team is very important for example were had a discussion as a team, which was about what we thought of the new methodology being adopted. This conversation with all four members let the team choose a principle that they would like to focus on as the top priority of the team and what aspect of the approach would be included in the project. After the discussion, our team decided that our main priority should focus on customer satisfaction. The daily stand-up is also important because this essentially does the same thing. Our team talks about what they did yesterday and what they plan on doing today along with listing any impediments that they faced or are facing. Then as a result of this communication were able to get a clear picture of what is being done for that day and let me as the scrum master attend to the impediments that way the developers and testers have everything they need to achieve their tasks at the end of the day.

One organization tool that was introduced was JIRA this tool helped with the agile principles that helped out the team by tracking all aspects of the sprint. The build-it Information radiator helped the team work more efficiently by employing better communication and also making all information visible to every team member within the project including the clients. This tool also has a feature in which the backlog can also be accessible which made backlog grooming much easier. It also tracks all the documentation which also helped with the weekly retrospect and log key information that will be very useful for the projects and future projects.

Using a Scrum-Agile approach has significant benefits but no approach is perfect. The pros of using the Agile approach can be seen in the table below.

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| --- | --- |
| Pros | Cons |
| More accurate time prediction | Can be complex to understand at first |
| Changes in the project are much easier | Different Work Culture |
| More adaptable to changes in the project | Scope Creep can hinder project lunch |

Overall, I would say that the Scrum-Agile approach was one of the best approaches for this project because the clarity of the project was not specified and the changes that come up in the middle of the sprint, which make it a great project example of how an agile approach made a significant difference for the SNHU Travel Project. When changes are made it would usually be very difficult to implement in the middle of development. Changes are always present in projects and having a flexible approach such as Scrum/Agile, can address these issues in a very effective way, other benefits of utilizing this approach are the level of self-organization and effective communication skill that can be applied to a wide range of projects making Scrum/Agile an excellent approach to adopt in and outside of the Software Development Life Cycle.