Sprint Review and Retrospective

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For our recent contract with Chada Tech our company tested a new approach to webpage development: The Scrum-agile method. A team of eight employed this method for five weeks to begin development on the new project. This brief five week window is called a “sprint” with the objective of narrowly focusing on a collection of components of the overall project. At the end of this sprint we conducted a sprint review which is a meeting between our team and the customer/stakeholders which summarizes to the stakeholders what we achieved during the sprint and to touch base with the customer about any changes or refinements to the project they might need (Geekbot, 2022). After the sprint review, we held a sprint retrospective, which is an internal meeting of the team which seeks to discuss any challenges we faced during the sprint and how we can improve during the next sprint. This document will draw from our sprint review and retrospective in order to give a broad overview of our team’s recent implementation of the Scrum-Agile framework.

**Team structure**

Our team was composed into four distinct roles: Product owner, scrum master, developer, and tester. Our product owner’s primary duty was to represent the customer’s needs and translate them into actionable items (Coursera, 2022). To this end, she met with the stakeholders and discussed what type of product they wanted. Chada Tech wanted to improve their website in order to capitalize on the upcoming vacation season. Our product owner assisted Chada tech in conducting a focus-group of website end-users to determine the features of the website which they most wanted. Based on the initial meeting and the focus group results, our product owner presented those ideas during the sprint planning meeting which translated them into user stories. She then ranked those user stories in order of priority so that our scrum team could start working on them during the sprint.

As scrum master, my primary duty was to facilitate scrum events and to ensure that our team was able to successfully follow the scrum-agile method (Coursera, 2022).. To this end I assisted our product owner during the customer interactions and lead the planning session and daily scrum meetings wherein members myself, developers, and testers would communally delegate the work needed for the day including, but not always, the user stories which our product owner wrote. For example, as my role was to help ensure all team members were equipped for success, when a team member’s chair broke it was my job to find them a new one. Leveraging my past experience as senior developer, I was also a resource to other team members who needed assistance with their tasks. Finally, at the end of the sprint, I facilitated the sprint review and sprint retrospective.

Traditionally, scrum roles do not include a tester (Mersino, 2022); instead, members with a deep knowledge of testing are included within the development team. Our implementation deviated from this framework slightly, however both testers and developers were expected to have joint ownership in the current tasks of the day. While the testers were indeed spending a large amount of time testing and while the developers were likewise occupied with developing, there were occasions where there were too many or not enough testing tasks for the day. There were also times where the two roles would need to collaborate in order to solve a particular task. In these situations, our team was able to pivot to the shifting business needs by dynamically assigning tasks. This ensured that all team members had a similar work load and provided our team members the opportunity to expand their skillset.

**User stories**

A user story is one component of a sprint. Over time, many sprints can produce a complete project. In our implementation, the anatomy of our user stories was a summary, acceptance criteria, how large the story is, its priority, and identifiers. The summary was a brief one or two sentence summary of what a customer wants I.E. “As an end user, I want to view travel recommendations based on how relevant they are to me based on my travel history.”. The acceptance criteria were a detailed list of what the task was and how it should behave. The size was an estimation for how long it would take to complete the story, the priority determined which stories we should work on first, and the identifiers such as story name simply helped to distinguish one story from another.

As mentioned previously, the lifecycle of the user story starts in the mind of the stakeholder; all clients have some idea of what they want. The product owner separates this vision into small pieces and writes user value statements. While product owner is in charge of representing the stakeholder’s vision, they are expected to collaborate with the scrum team when writing acceptance criteria (Hutchison, 2018). During the sprint planning meeting we, as a team, estimated the length of each user story and the product owner then prioritized those user stories. During daily scrum meetings, our team dynamically assigned members to stories in accordance with their priority level and length. At the end of the sprint we had completed a large number of these user stories, with the rest going into our backlog for the next sprint.

From beginning to end, the Scrum-agile methodology enabled us to create actionable items by siloing them into individual and isolated units, plan when and how long we would work on them, explain the precise nature of what we will be working on, then plan who would work on them. Daily scrum meetings allowed team members to discuss any road blocks which may be preventing the stories from being completed and my role as scrum master empowered me to help assist the team members in removing those obstacles so that the stories could be completed in a timely manner. Finally, the flexibility of the agile methodology enabled us to easily reprioritize our stories in order to better align with the stakeholder’s change in requirements.

**Change in requirements**

Midway through our sprint, our product owner informed us that the client wanted to pivot the focus of the sprint away from providing end-users with a personalized list of vacations and into giving end-users a list of vacations from a particular genre.

Were we to stull be under the waterfall paradigm, the result of this change would have been devastating. Under the Scrum-agile methodology, our product owner was able to write a few more user stories and re-arrange the user story priorities. Because the user recommendation algorithm’s story was placed on a lower priority than the structural elements of the project, we were able to quickly shift to the new story without any loss of productivity. The reason these structural elements had a higher priority than the algorithm was because the agile framework emphasizes the need to get a working product up and running first before adding extra features; what we had been working on up until this point was creating web pages, formatting text boxes, and adding buttons.

On the subject of creating web pages, we did at one point need to reach out to the stakeholders for clarification about what format they were wanting the vacation list to be presented in; using our pre-established scrum roles our product owner was able to partner with the stake holders and receive the updated information in a timely manner.

**Collaboration and Communication**

Because we were able to establish a clear framework to operate under thanks to the scrum guidelines and our team charter, we had a clear understanding of who ought to be in charge of what portion of the project. This clarity enabled us to have a clear understanding of what we needed from each member. Below is a sample E-mail sent by one of our developers to our product owner and tester, seeking more information about the requirements of a particular story:

“

RE:RE: User Story Clarifications

Christy,

I think we had some great ideas from our focus group, but it looks like the ideas they generated may need to be refined into a cohesive product vision. We would like your feedback on the following:

User story #1: Browse and filter destinations

* The focus group identified price, climate, activity, and travel method as important search criteria. Are there other elements which your firm sees as particularly salient to its clients?
* Would you like a drop down filter icon in the top left corner of the slide show?
  + Would this icon be hidden until the cursor moves near its location?
* Is the top ten slide show a separate section from the search results for user destinations?
  + How might users search for destinations apart from the slide show?
    - How can they navigate to this section?

User story #2: Filter option: Price

* Will this filter setting be in the form of to different text boxes in which users can enter a minimum and maximum price respectively?
* Will this filter setting instead be a sliding bar style with two adjustable points representing minimum and maximum price?

User story #6: Recommendations based on travel history

* As with user story #1, we would like to confirm which elements are salient to vacationers when choosing a destination
* Should the recommendations be as identical as possible or should the vacations be slightly different in order to provide a bit of variety?
  + Which aspects of the destination should be different?
    - Should the location be the same, but with a different activity?
    - Should the location be different, but with the same activity?

I appreciate your time in clarifying these points so that we can help your team gain a perfect product.

Thanks,

-Rachel”

**Helpful tools and principles**

One principle which was helpful to us was the principle of quickly delivering software. Because we prioritized the foundational elements of the project such as page design rather than ancillary elements such as the recommendation algorithm, we were able to pivot to a change of focus without much delay. Even on an occasion where we received revised specifications on the web page structure we were able to make a few minor changes without much disruption in workflow.

Another principle which helped us is welcoming changing requirements. While there was some amount of unhappiness from our team whenever the requirements drastically changed, this change in requirements would have happened anyway under the waterfall paradigm and because we wouldn’t have realized this change until much later it would have made it incredibly difficult for our team to deliver a product the customer was satisfied with.

The scrum meeting was a helpful tool which helped apply the principle of sustainable development. Previously our team members were unsatisfied with the distribution of labor across the various roles. Under Scrum-agile, we were able to collectively establish joint ownership of the project, delegate tasks, and manage expectations if we were not able to accomplish a particular user story.

**The Effectiveness of the Scrum-agile Approach**

As we have discussed, the stakeholder’s change in requirements was one of the greatest challenges of this project. The agile methodology embraces change and allows for piecemeal planning rather than planning everything in advance and not deviating from that plan. We were able to deliver the right product to the stakeholder because of this aspect of agile methodology.

I was asked to critically evaluate the effectiveness of our new approach, however this project seemed to be an almost ideal scenario to showcase the strengths of the Scrum-agile framework; almost as if it only existed on paper. While we encountered zero shortcomings of the approach in this particular instance, this beatific series of events may not always continue; we should be mindful of not only the positives of this new approach, but also its limitations. With each strength there is also an associated weakness.

The most salient aspect of the methodology is its willingness to embrace change. A strength of this aspect was demonstrated by the change in requirements. A weakness could arise due to having no precisely defined endpoint and with planning being an ongoing project rather than a one-time event (Chandana, 2023). This weakness can manifest in scope creep which expands the project in directions which could be potentially deleterious to the usefulness or lifespan of a product. Sometimes a job gets done.

Another aspect of the methodology is a low team member count. A strength of lower team members is the opportunity for self organization and higher quality communication across all team members. A weakness of this aspect is that it can limit the range of skillsets in a given group and relies more on each team member; if a team member is non-cooperative or leaves the team in the middle of a sprint a smaller team will be hit much harder than a larger one. Neither a strength or weakness, but a complexity of this aspect will be that there will be potentially several teams each working on a specific component of a stakeholder’s vision. If we implement this methodology, coordination between multiple teams will present a form of managerial complexity which did not exist in this pilot sprint.

The last aspect I want to focus on is ownership of a product’s quality. Under the Scrum-agile methodology the entire team is responsible for all aspects of a product’s quality. A strength of this approach is that because the developer and tester are so close that they may share a cubicle, or even a keyboard, it allows for a high degree of communication and collaboration which could accelerate the process. A weakness of this approach is that the same team which wrote a program is the one testing it; such an arrangement may present certain conflicts of interest which were not present whenever the roles of developer and tester were much more divided.

In summary, this particular sprint was an enormous success and we faced very few setbacks. If I were to choose whether the Scrum-agile or the waterfall methodology was the better fit for this particular project, my very strong choice would be the Scrum-agile methodology.

Works cited:

Geekbot. (2022). Sprint Review vs Sprint Retrospective: The Critical Difference. *Geekbot Blog*. <https://geekbot.com/blog/sprint-review-vs-sprint-retrospective-the-critical-difference/>

Coursera. (2022). The 3 Scrum Roles and Responsibilities Explained. *Coursera*. https://www.coursera.org/articles/scrum-roles-and-responsibilities

Mersino, A. (2022, January 26). *What is the role of a tester in Scrum? is Agile Tester a thing?: Vitality Chicago Inc..* Vitality Chicago Inc. | Agile Training, Coaching & Transformation. Retrieved April 16, 2023, from https://vitalitychicago.com/blog/what-is-the-role-of-the-tester-on-a-scrum-team/

Hutchison, C. (2018, December 3). *Blog: Successful scrum acceptance criteria*. Scrum Adventures. Retrieved April 16, 2023, from https://scrumadventures.com/successful-scrum-acceptance-criteria/

Chandana. (2023, April 7). *Scrum project management: Advantages and disadvantages*. Simplilearn.com. Retrieved April 16, 2023, from https://www.simplilearn.com/scrum-project-management-article