# CS 250 Final Project: Sprint Review and Retrospective

Ebony Jones  
CS 250 Software Development Lifecycle  
**6**/14/2025

## Introduction

As the Scrum Master for ChadaTech's pilot transition from waterfall to Agile methodology, I led our team through the complete development lifecycle of the SNHU Travel application. This Sprint Review and Retrospective analyzes the effectiveness of the Scrum-Agile approach and provides insights for ChadaTech's broader organizational transition.

## Applying Roles: How Scrum Team Roles Contributed to Project Success

Each role on our Scrum-Agile team made specific contributions to the SNHU Travel project's success. As **Scrum Master**, I facilitated all Scrum events and removed obstacles that threatened progress. When developer Brian encountered payment system integration challenges, I arranged technical consultation and adjusted sprint timelines, preventing major setbacks in our five-week deadline.

**Christy, our Product Owner**, proved essential in translating Amanda's business vision into actionable requirements. When the project evolved from destination listings to vacation packages, Christy managed this scope change effectively by providing detailed wireframes and acceptance criteria that eliminated typical mid-project confusion.

**Nicky and Brian, our developers**, demonstrated self-organizing principles by proactively researching mobile-responsive design solutions and payment integration options. When vacation package displays needed slideshow format rather than simple lists, they adapted their technical approach without requiring extensive re-planning meetings (Beck, 2004).

**My role as tester** created feedback loops that caught issues early and prevented costly rework. By collaborating closely with the Product Owner to clarify requirements before development, I identified potential usability problems that could have emerged late in the development cycle.

## Completing User Stories: How Scrum-Agile Approach Supported User Story Completion

The Scrum-Agile approach provided a structured yet flexible framework that helped user stories progress efficiently from concept to completion. **Sprint Planning** sessions broke user stories into manageable development tasks, revealing technical dependencies early. **Daily Scrums** created transparency that helped stories reach completion faster by identifying blockers immediately. **Backlog refinement** activities helped break complex stories into sprint-sized pieces. **Sprint Reviews** provided stakeholder feedback ensuring completed stories delivered intended user value, preventing technically correct but functionally inadequate solutions (Cohn, 2010).

## Handling Interruptions: Scrum-Agile Response to Project Direction Changes

The transition from destination listings to vacation packages represented significant scope change that could have derailed waterfall development. However, our Scrum-Agile methodology provided necessary flexibility. **Sprint boundaries** contained the impact because we hadn't committed to long-term plans. When changes emerged during Sprint 2, we completed current objectives then reorganized the product backlog for remaining sprints. **Product Owner involvement** proved crucial as Christy worked with Amanda to clarify new requirements while developers finished current commitments. **Team self-organization** allowed developers to assess existing work and plan new development efficiently.

## Communication: Effective Team Communication Examples

Effective communication formed our team's foundation throughout the project. **Structured email communication** proved effective when I needed user story clarifications as tester, grouping questions by category (performance requirements, error handling, integration behaviors) allowing comprehensive responses rather than lengthy exchanges. **Daily Scrum format** used consistent three-question structure promoting transparency and collaboration (Schwaber, 2020). **Sprint Review demonstrations** showed working software rather than status reports, eliminating ambiguity and enabling specific feedback. **Retrospective feedback sessions** used "Start, Stop, Continue" format encouraging honest communication focused on improvement rather than blame.

## Organizational Tools: Evaluating Tools and Scrum-Agile Principles

Several organizational tools contributed significantly to our success. **Kanban Board Visualization** provided real-time work visibility, enhanced by Daily Scrum events where members updated task status. **Product Backlog Management** tools helped prioritize features based on business value, amplified during Sprint Planning events where teams collaborated on user story breakdown. **Sprint Tracking Mechanisms** provided data-driven insights into velocity and progress, working effectively with Sprint Review events for analyzing completed work. **Communication Platforms** centralized project discussions and maintained decision history, enhanced by Backlog Refinement sessions.

## Evaluating Agile Process: Effectiveness Assessment for SNHU Travel Project

### Pros of the Scrum-Agile Approach

The Scrum-Agile methodology provided significant advantages. **Adaptability to changing requirements** proved invaluable when scope shifted from destinations to vacation packages, allowing incorporation of new requirements in the next sprint cycle rather than requiring extensive replanning. **Stakeholder engagement** through regular Sprint Reviews ensured features met user needs. **Team collaboration and self-organization** created engaged, productive environments where members took ownership and proactively identified solutions. **Early problem detection** through regular communication prevented small issues from becoming major obstacles.

### Cons of the Scrum-Agile Approach

Despite advantages, challenges emerged. **Learning curve requirements** consumed significant time as members adapted to new roles and responsibilities, temporarily reducing productivity. This mirrors challenges where teams implement Agile practices mechanically without understanding underlying principles (Cobb, 2015). **Documentation trade-offs** meant some decisions were captured less formally than traditional approaches, occasionally creating confusion. **Stakeholder availability requirements** created dependencies that sometimes slowed decision-making when clarification was needed.

### Determination: Was Scrum-Agile the Best Approach?

Based on our experience, Scrum-Agile was definitively the best methodology for this development effort. The project's characteristics made it well-suited for Agile: uncertain and evolving requirements, tight timeline requiring rapid delivery, and available stakeholders for regular collaboration. The scope change would have been devastating in waterfall, potentially requiring complete restart of analysis, design, and development phases. Our framework absorbed this change with minimal disruption, demonstrating the methodology's core strength in handling uncertainty.

## Conclusion

Our pilot transition demonstrated significant advantages supporting broader organizational adoption. The framework's adaptability, stakeholder engagement capabilities, and collaborative principles enabled successful product delivery despite challenging timeline and scope change pressures. I recommend ChadaTech proceed with transitioning additional development teams to Scrum-Agile methodology, with appropriate training and change management support. However, ChadaTech should avoid common pitfalls such as viewing Agile as merely a development process or implementing practices mechanically without understanding underlying principles. Success requires dedicated team members, executive support, and commitment to cultural change extending beyond the development organization (Cobb, 2015).

# References

Beck, K. &. (2004). *Extreme programming explained: Embrace change (2nd ed.).* Addison-Wesley Professional.

Cobb, C. G. (2015). *The project manager's guide to mastering agile: Principles and practices for an adaptive approach.* John Wiley & Sons.

Cohn, M. (2010). *Succeeding with Agile: Software development using Scrum.* Addison-Wesley Professional.

Schwaber, K. &. (2020). *The Scrum guide: The definitive guide to Scrum: The ruls of the game.* Scrum.org.