



## Why Not Scrum

By Mike McEwen, Dynanet Director, Software Solutions

Many software development organizations are thinking about adopting the agile framework known as Scrum. After all, who wouldn't want to deliver functional software faster, improve responsiveness to sponsors and customers, increase trust between business staff and technologists, and create highly effective teams that can solve complex problems? Those benefits, however, remain elusive to many organizations starting the Scrum adventure.

Scrum teams plan, design, develop, integrate, test, and demonstrate working software within two-to-four week iterations called a sprint. Before the sprint begins, the team defines what "completion" or "done" actually means. Dynanet defines done as meeting predefined acceptance criteria, being fully tested, and residing in the configuration management repository. The team spends a few hours at the beginning of each sprint for planning. During the planning session, the team selects items from a prioritized product or feature backlog.

A Scrum team conducts a planning session before each development sprint to assign release backlog items to the sprint. Team members make their selection decisions based on priority and an estimate of the size and effort of the items. The size/effort estimates can be assigned to a story before the sprint planning session (e.g., during a backlog refinement meeting) or during the session. The size/effort estimates can be expressed in terms of hours or points. If points are used, team members typically assign them based on "reference" stories they have already implemented but remembered as standards for future estimation. Point values are typically only numbers in a Fibonacci series (i.e., 1, 2, 3, 5, 8, etc.). The sprint backlog consists of all user stories assigned to a sprint. During the planning session, the team also decomposes each user story into one or more development tasks. The team then estimates the number of hours required to complete each task and assigns them to development team members. Team members commit to completing their assignments within the development sprint.

During sprint execution, members participate in a short, daily meeting called a scrum. Scrum participants summarize what they did the previous day, state plans for the day, and identify any roadblocks (impediments) putting sprint commitments at risk. To complete each sprint, the team demonstrates the results of completed tasks to the Product Owner, who provides feedback in the form of acceptance or

### ABOUT DYNANET

Dynanet Corporation has a long history of successfully assisting federal and state governments in accomplishment of their missions. The proof of our success is in the numerous accommodations and awards we have been given and the list of partners who choose Dynanet as a business team member. Our talented and certified professionals are led by a highly experienced and senior leadership team with both private sector and federal experience.

8182 Lark Brown Road,  
Suite 300 | Elkridge,  
Maryland 21075 |  
443-661-1403 |  
[www.dynanetcorp.com](http://www.dynanetcorp.com)

changes required. Any changes are put onto the release backlog for future sprints. Team members meet after every sprint to discuss positives (what went well), negatives (what did not go well), and changes to make in future sprints. Feedback shared during sprint retrospectives helps the team realize its goal to be self-organizing and supports continuous improvement.

A rugby team comes together in a scrum to return the ball to play. As we mentioned earlier, the software team comes together every day in a scrum meeting to discuss status and impediments. A Scrum Master enforces “ceremonies” like the daily scrum and works to remove impediments. The Scrum Master is not necessarily a functional or project manager that the team reports to. Ideally, the team would run itself but, in real life, people get lax and encounter impediments that require action outside the team. This is where the Scrum Master adds value. The Scrum Master should also protect the development team from being assigned new tasks not considered during the planning session. At Dynanet, our Scrum Masters are certified by the Scrum Alliance. They also maintain release schedules and budgets, ensure that automated Scrum boards are up to date, and are certified Project Management Professionals.

The Product Owner establishes and maintains a vision for the system that the team will develop incrementally. The feature (or product) backlog is the list of items describing the capabilities that the Product Owner envisions for the system. The Product Owner assigns priorities to each backlog item and refines (or grooms) the list regularly to add new features, clarify features, adjust priorities, or remove features to keep the vision aligned with the organization’s business objectives. The Product Owner works with other stakeholders to define bundles of unimplemented items on the product backlog that will be implemented as releases. The Product Owner adds details (e.g., acceptance criteria) to each item planned for a release. When ready for consideration by the development team for a sprint, the backlog item is called a user story. Each user story includes acceptance criteria. At Dynanet, business analysts work directly with Product Owners and serve as Product Owner proxies when a single Product Owner is not available.

Information radiators give the Scrum team and other stakeholders a view into the development team’s progress. The primary radiator is the burn down chart, which shows the number of tasks, stories, or hours remaining in the sprint as reported by developers. Another radiator is the Scrum board, which shows the status of each story or task (e.g., in development, ready for testing, etc.). Dynanet uses physical Scrum boards as well as automated tracking systems such as Atlassian JIRA with the Agile plug-in. Physical Scrum boards are nice when the team is collocated in the

same facility, which is the preferred scenario. However, an electronic board or tracking tool is better suited to today's geographically distributed workforce. If some stakeholders work remotely, then the team should provide other ways to encourage communication between all parties (e.g., meetings and notes, conference calls, more robust user stories and acceptance criteria, etc.).

Dynanet delivers award-winning software by leveraging lessons learned since embracing Scrum almost two years ago. Join me in future posts as I share some of those lessons with you.