# **SCRUM | The Art of the Possible**

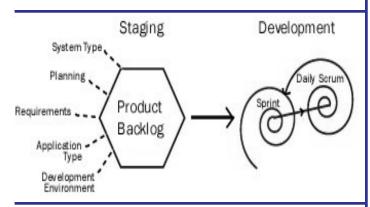
Scrum is a suite of products for Agile software development. Scrum's iterative, incremental practices allow development teams to rapidly deliver functionality to customers. Scrum consists of:

## Methodology Software Training

- Methodology with different paths appropriate for most types of software development projects;
- Software that facilitates workload, trending and ROI management; and,
- Courseware that teaches how to use the methodology and tool in your projects.

Scrum provides organizations with a way to bring software to the customer faster and better while increasing the level of control and lowering overall project risks. While providing Level 3 CMM compliance, Scrum also integrates into CMM Level 4 and 5 organizations.

Scrum has been modified to accommodate many different environments and customer practices. Scrum has been successfully implemented all over the world since in 1993. It has been used in thousands of projects, including large-scaled endeavors at Fidelity Investments, IDXSystems, TransCanada Pipelines, Microsoft, Cahners Publishing and hundreds of other organizations.



"I have become one of the Scrum evangelists as seeing is believing. We recently had a meeting with our customers and there has been a 180 degree turn in their satisfaction over the last 6–8 months. Some of it is attributable to reorganization of resources on their part, but I believe a major reason for our turn-around is our (new) approach to development."

—a senior executive at a large financial institution

### Methodology

Scrum is a project and product management methodology that rapidly delivers working software to customers and users. Some of Scrum's characteristics are:

- Iterative, incremental software development based in Agile practices;
- Implementation in 1 day;
- Delivery of working functionality in 30 days;
- Wrapping of existing engineering practices;
- Application to both new and existing projects; and,
- Accommodation of all types of development projects.

Scrum consists of four phases . The phases are:

- Planning phase develops initial requirements, release planning, and architectural and business vision. Return on Investment (ROI) gauges are established when the project is funded;
- Staging phase when non-functional requirements are included in the requirements backlog. Route maps accommodate each type of project;
- Development phases when one or more teams takes over, delivering top priority functionality every thirty days. Teams are cross-functional and empowered to do their best. At the end of each iteration, the team demonstrates an increment of potentially shippable functionality; and,
- Release phase when management determines that a product is ready to release either because of the release date or that enough functionality has been developed to for the organization to benefit.

All development activity occurs within the iterations in the Development phase. This focuses all iteration work on generating usable functionality rather than intermediate work products.





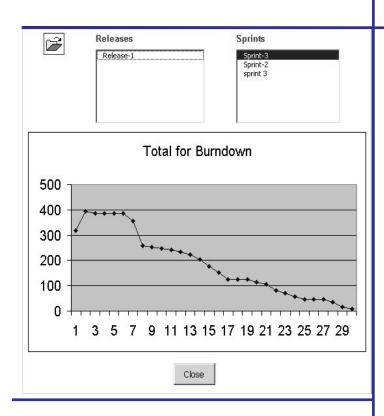
#### **Applications**

Organizations have built many types of products and applications with Scrum:

- FDA approved medical products for radiology;
- enterprise workflow products;
- business object application servers;
- application development environments;
- tunable laser subsystems for fiber optic networks;
- web news products;
- media neutral magazine products; and
- financial payment applications.

#### Courseware

This training is targeted to the project managers, project leads, and management that will be responsible for managing Scrum-based projects. The training explains the various roles and responsibilities in a Scrum project, how to setup a Scrum project, how to scale a Scrum project to include multiple teams and hundreds of developers, and how to manage the Scrum iterations. The empirical approach to project management are explained using case studies and class exercises. The course lasts three days.



Scrum is one of the original Agile processes, adhering to the values enunciated in the Agile Manifesto:

"We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

While there is value in the items on the right, we value the items on the left more."

### Scrum Project Management System

Specifically designed to manage iterative, incremental, complex software development projects, the Scrum Project Management System enables managers to track projects, releases, and iterations. The system allows for the detailed management of requirements, workload, and prioritization.

The system's basic and extended functionality are powerful, yet the system's basis in the familiar spreadsheet format renders it easy to use for management and technical team members alike.

The sample chart on the left displays the burndown, or trending, of work during an iteration. Work is represented on the vertical axis and days are represented on the horizontal axis. By inspecting the burndown chart, management can assess the probability of developing selected functionality by a specified date. Charts are maintained at a team, iteration, release, and project level.

The Scrum Project Management System can be used as a standalone management, reporting, and tracking system or as a supplement to other such tools.

For more information, please email scrum@controlchaos.com.

Advanced Development Methods Lexington, Massachusetts