

Agile Development

See Business Benefits - Faster

Agile is a software development methodology. There are many different 'flavours' of Agile. SFW uses Scrum for its software development projects. Scrum, developed by Ken Schwaber, defines a set of rules which enables a team to gain better productivity in their software development project.

Scrum uses incremental delivery, each increment is called a Sprint. Requirements are placed into a Product Backlog which is prioritized by the customer. The development team chooses the items it thinks it will complete in a Sprint and then delivers high quality, tested software at the end of each Sprint.

Scrum

Scrum, along with most other Agile methodologies, uses incremental delivery. Each increment is set in length, typically 4 weeks. In Scrum, each increment is known as a Sprint. At the end of each Sprint the team will deliver working software to the customer; this software will be fully tested and deployable. At the end of the Sprint, it is up to the customer whether they deploy the software or not, based on whether they will see any business benefit. This means that customers can deploy software sooner than if they were using a traditional waterfall process. This enables them to deliver the business benefit quicker.

Before development work can take place, preparation work needs to be completed. The most important thing to come out of the initial phase is the Business Case. This will contain the expected business benefit and enable the team to ensure that they are still on target to meet the benefit at the end of each Sprint.

An Initial Product Backlog will also be created. This will contain a broad list of the customer's requirements. This only needs to contain enough detail for the team to create a rough estimate in terms of effort days; each Item should have an effort estimate to facilitate planning. The customer will then order the Product Backlog, placing the items which will bring the most business benefit at the top of the list.

Once the preparation work has been completed, the team can enter the Sprint Cycle. This comprises the following steps:

Sprint Planning Meeting

- Daily Scrums
- Product Delivery
- Sprint Review
- Sprint Retrospective
- Update Product Backlog

In the Sprint Planning Meeting, the team will decide how many of the Product Backlog Items they can complete in the next Sprint. They will choose items from the list, concentrating on those which will deliver the biggest business benefit. The team transfers these requirements into tasks which are held in the Sprint Backlog. This is an important step in the self management of the team.

The team will then start a sequence of Daily Scrums. This revolves around having a daily meeting every morning where the team meet to discuss the project. This meeting and it's analogy to the meetings held on a rugby pitch, is where the term Scrum comes from. In the meeting each team member will take it in turn to explain what they did yesterday, what they are intending to do today and any problems they have faced.

Unlike traditional development methods, each developer completes a Design, Build and Test cycle for each requirement. This ensures that only fully tested code makes it into the project. When the team approaches the end of the Sprint, they will release the software to the customer.

At the end of each Sprint, there is a Sprint Review. This is where the team presents the completed software to the customer and explains what they have achieved in the Sprint. During these meetings, any items mentioned are added to the Product Backlog.

The Sprint Retrospective is a meeting where the team analyse what went well in the last Sprint and what they should improve in the next. This regular feedback ensures that team performance improves as the project progresses.

Finally, the Product Backlog is passed to the customer for them to reorder. This then feeds into the next Sprint where the Sprint Cycle starts again. Since the customer controls the items in the Product Backlog, they can prioritise work. This combined with the regular feedback achieved through iterative development gives them greater control over their development budget.

Benefits of Agile

- Better control over expenditure
- More flexibility for changes
- Earlier business benefit
- Transparency into the development process

About SFW

SFW, established in 1992, is a Microsoft Certified Gold Partner with extensive experience working with Private and Public sector organisations. SFW truly understands the nature of these organisations and the challenges they face, combining this with the technical knowledge and ability to deliver streamlined effective tools that improve efficiency and enhance the experience of every user.

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