

Agile Software Project Management - Scrum methods

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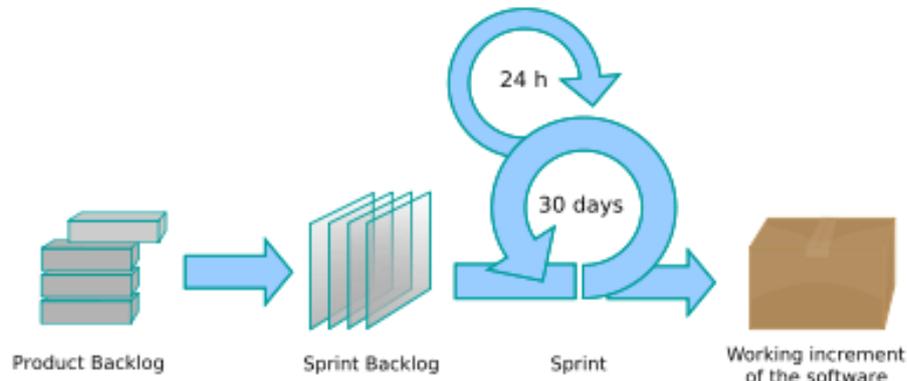
The core principle of project management remain unchanged and deal with mainly five process groups, initiation of projects, planning projects, directing and executing projects, monitoring and controlling projects, and closing projects which interact with nine knowledge areas of scope management, time management, communication management, risk management, cost management, quality management, Resource management, Procurement management. A successful project manager must be able to align these with the overall business success of the organization. Then what is changing in the project management? It is the way we manage projects day to day, there are many ways to manage a project, now there is whirlwind happening in the project management world especially in IT Project Management that is called "Agile". So agile approach is a way of delivering projects. There are many agile development methods. Most of them minimize risk by developing software in short amounts of time, and scrum is one among them.

Agile Approach - Scrum

If you are involved in a project that has to produce so many deliverables in a short time frame, then the Sprint Approach is the most appropriate. In this approach we have to break down all of the tasks that a team has to deliver in 3 to 4 weeks. These 3 to 4 weeks period are called sprints. The set of sprints generated from the product backlog are formed for the entire project and kept in a sprint backlog. The sprint backlog is a greatly detailed document containing information about how the team is going to implement the requirements for the upcoming sprint. Tasks are broken down into hours with no task being more than 16 hours. If a task is greater than 16 hours, it should be broken down further. Tasks on the sprint backlog are never assigned; rather tasks are signed-up by the team members as they like.

Scrum is an iterative incremental process of software development commonly used with agile software project management. The set of features that go into each sprint come from the product backlog, which is a prioritized set of high level requirements of the works to be done. The product backlog is a high-level document for the entire project. It contains broad descriptions of all required features, wish-list items, etc. It is the "What" that will be built. It is open and editable by anyone. It contains rough estimates, usually in days. This estimate helps the Product Owner to gauge the timeline and, to a limited extent, priority (e.g. if "add spell check" feature is estimated at 3 days vs. 3 months, that may affect the Product Owner's desire). What back log items go into the sprint backlog is determined during the sprint planning meeting (as desired by the product owner) and forwarded to sprint back log. Agile method offer transparency in planning and module development and it allows everyone know who is accountable for what and by when.

And from the sprint back logs each sprint with a definite goals are carried out incrementally until the entire projects objectives are satisfied. The following diagram shows the Scrum process.



At the start of each sprint, the team together set the goals of that duration, in this approach the team need to think about only the goals set for them for that short period and they start their sprint, in this the weight of the project is lifted off from their shoulders and as a result they can achieve the goals and the team become incredibly focused. Frequent risk and mitigation plans developed by the development team itself. – Risk Mitigation, Monitoring and Management (risk analysis) done at every stage with reliability and accuracy.

The team has the responsibility to deliver the product. A small team of 5-9 people with cross-functional skills to do the actual work (designer, developer etc.) depending upon the project. Like all other forms of agile software processes, Scrum has frequent intermediate deliveries with working functionality. This enables the customer to get working software earlier and enables the project to change its requirements according to changing needs and thereby more flexibility to maintain quality standards. And also Workplaces and working hours will be energized as team themselves takes the ownership and they realizes themselves that "Working more hours" does not necessarily mean "producing more output." But the team themselves taken initiative to meet the targets by working smartly on various sprints as per their priority (even 24X7 hours per day 3 shifts of 3 teams) and cut short the project duration considerably depending on the nature of the project and its urgency.

Scrum Roles

Several roles are formed in the scrum approach they are categorized under pig roles and chicken roles. That is the product owner, Scrum Master and team together forms the pig roles in the scrum process. Chicken roles are not part of the actual scrum process; they are users who use the software, stake holders such as vendors, customers who are enable the project but are not directly involved in the process (But Customers become a part of the development team (customer buy in), and finally managers in the product development organization who will set up the environment for

the project. Frequent stakeholder meetings are conducted to monitor progress to Balance various factors Delivery, Customer, Employee, and Processes.

Sprint Meetings in scrum process

To help the team as a project manager (Scrum Master) you can hold daily meetings called Sprint Meetings which will help our team focused on their daily activities only. We have to keep this meeting approximately 15 minutes duration and discuss only the team goals of that day, which will boost communication and help to build a sense of accomplishment among team members, and it also reduce politics and will increase efficiency as everyone knows what they have to do for that day and the team takes the ownership and we are there as a project manager (Scrum Master) just to make them focus, if they go off track. The Scrum Master is not the leader of the team (as they are self-organizing) but acts as a buffer between the team and any distracting influences. The Scrum Master ensures that the Scrum process is used as intended. The Scrum Master is the enforcer of rules and sprints of practice.

Sprint Reviews in Scrum

At the end of each sprint the team leaders should meet the scrum master/ project manager and review the sprint result. And they should present the sprint goals accomplished and should inform the lessons learned and how they are going to use those lessons learned for their next sprint/project this process is called Sprint Reviews. In this process no problems are swept under the carpet and no one is penalized for recognizing or describing any unforeseen problem, ultimate aim is the success of the project.

Here we can notice that most of the time the project manger(Scrum Master) acting like a customer, the project manager's stress and strain are reduced but the success rate of projects are increased because the team as a whole will be responsible for managing their own progress, reviewing their performances and improving their actions to meet sprint goals. But scrum masters have to have advanced warning mechanism, i.e. visibility to potential slippage / deviation ahead of time, keep up a reporting system to update stakeholders to avoid surprises etc., are very important.

Ref: - [http://en.wikipedia.org/wiki/Scrum_\(development\)#History](http://en.wikipedia.org/wiki/Scrum_(development)#History)

About the Author



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