

Agile / Workflow

Using workflows for fun & profit

Everyone hates "process", but let's face it: without an established workflow, you're going nowhere fast.



Every software team has a process they use to complete work. Normalizing that process—i.e., establishing it as a workflow—makes it clearly structured and repeatable, which, in turn, makes it scalable. At Atlassian, we take an iterative approach to workflow management because it helps us meet our goals faster and exemplifies our team culture. We are experts in agile workflow management (if we do say so ourselves), and we want to help you become experts too.

Start simple, start now

When implementing a workflow for the team, always start simple. Fight the temptation to spend weeks (over-)engineering it. Overly complex workflows are hard to understand and adopt-not to mention adapt. For software teams, we recommend these basic workflow states:

IN PROGRESS

Work that is actively being looked at by the team.

CODE REVIEW

Work that is completed, but awaiting review.

DONE

Work that is completely finished and meets the team's definition of done.

In an issue tracker, these statuses flow from one to the next using transitions which structure the workflow.



Some software teams include additional states in their workflow that help them track the status of work more precisely.

AWAITING QA

Work that has been implemented, but is still waiting for a tester review (see our article on agile testing for more details).

READY TO MERGE

Code that has been reviewed and is ready to merge into the master or release branch.

agility, after all.

Healthy workflows adapt to the needs of the team. Occasional pain is normal. Chronic pain is not.

Discuss each pain point in the team's retrospective, and keep in mind that each team will have slightly different values based on their project, technology stack, and method in which they like to work. That's why it's important to choose an issue tracker that has a flexible workflow configuration. Too many teams compromise their work style to fit a particular toolset, which is frustrating for everyone. So team members start to avoid using that tool altogether, compounding frustration across the team and generally wreaking havoc. And when morale falls, productivity suffers. That's a double whammy we all want to avoid!

Teams that are new to agile or that don't have cross-functional skills often end up with "mini waterfalls" in their workflow. For example, design kicks off a work item with a mockup. Development does the implementation. Test confirms quality. Each state is blocked until the former state is complete. Sound familiar? That's waterfall. But we can do much better with agile workflows to unblock the team and make development easier.

Optimize the workflow

are functionally different and can be individual statuses. Aim for a lean set of statues that still clearly communicate what phase a piece of work is in.

Project statuses can also be shared with the rest of the organization. When building a workflow, think about which metrics are important to report on and what non-team members might be interested in learning. For example, a well designed workflow answers the following questions:

- What work has the team completed?
- Is the backlog of work increasing or keeping pace with the team?
- How many items are in each status?
- Are there any bottlenecks that are slowing the team down?
- How long does it take to complete an average task?
- How many work items didn't pass our quality standards the first time around?

The next step in optimizing the workflow is to ensure a steady stream of work through the workflow. Work-in-progress (WIP) limits dictate a minimum and maximum number of issues in a particular state of the workflow, making sure each state in the workflow has enough work to keep the team fully utilized, but not so much that they lose focus because they're juggling priorities. Enforcing work-in-progress limits will quickly show which processes in the team are slowing down the overall work through the pipeline. As the team learns to optimize around its work-in-progress limits, throughput will increase. (See the article on WIP limits for more details.)

often want to optimize their own workflow to reflect their unique process and culture. Perfectly understandable. But it can create headaches when different teams use different processes but work on the same project.

Agile teams that work together can benefit from sharing the same workflow. Using the same workflow can make transitioning work between agile teams easier, because they use the same conventions for defining and delivering work. Creating a common process usually involves some give and take from both teams. That's good! They'll learn from one another and come out with a better workflow in the end.

PRO TIP

With Jira Software, Atlassian's issue tracker, teams can share workflows but have different representations of the process on their agile board. This ability leads to flexible visualization options without sacrificing the shared asset of workflow.

No matter what your workflow looks like, the process of developing it should be agile, too. Discuss it in retrospectives from time to time, and adapt it as the team's culture and composition changes.

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Agile has had a huge impact on me both professionally and personally as I've learned the best experiences are agile, both in code and in life. You'll often find me at the intersection of technology, photography, and motorcycling. Find me on Twitter! @danradigan

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