

Agile Project Management Tools: An Overview and Comparison

Software Engineering (IT314)

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- Agile methodology: A quick recap
- Agile project management tools and their need
- Parameters for tool comparison
- Different types of agile management: An important comparison parameter
- Various agile management tools: Features and comparison

Agile methodology: A quick recap

- A project management methodology, mainly for software development
- Works by dividing the whole task into smaller pieces
- Attaches these smaller pieces in short and incremental phases of work called as 'Sprints'
- Primary goals:
 - Rapid and early delivery
 - Frequent reassessment
 - Adaptive planning
 - Continuous improvement
 - Flexibility for change

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Agile project management tools and their need

- Agile methodology in itself is just a concept
- Agile Project Management Tools are means to realise the concept in real world
- These tools facilitate:
 - Easy management of projects and team
 - Easy and fast collaboration
 - Easy project tracking and work delegation
 - Central storage of data pertaining to project management
 - Time tracking
 - Quick reporting

Agile project management tools and their need

- Some popular Agile Project Management Tools:
 - Monday.com
 - Nifty
 - Wrike
 - SpiraTeam
 - ClickUp
 - Teamwork
 - Freshservice
 - Atlassian Jira
 - Active Collab
 - Taiga etc...

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Parameters for tool comparison

- Different types of agile development strategy supported
- Cost
- Features
- Intuitiveness of user interface
- Availability on cloud
- Customizability
- Security
- Integration with other tools

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Types of Agile Project Management: An important comparison parameter

- There are many frameworks for Agile Project Management
- Following are a few prominent ones:
 - Scrum
 - Most popular framework
 - Takes a highly iterative approach in form of small sprints
 - Divides the entire team in small teams called Scrum Team
 - Scrum teams meet daily for 15 minutes or less to assess the progress
 - Sprints may include Sprint Review and Sprint Planning meetings

Types of Agile Project Management: An important comparison parameter

- Kanban
 - Developed by Toyota
 - Kanban is a Japanese word which means 'Signboard'
 - Focuses mainly on balancing the demand and available capacity
 - Uses the concept of Kanban board to indicate tasks in various stage of progress
- Extreme Programming
 - Prominent features include: Pair programming, extensive code review, unit testing
 - Emphasis on: Not programming a feature until it is really needed, flat management, code simplicity

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Jira

- Highly extensible and extremely customizable, example: customizable Scrum and Kanban Boards
- Supports multiple advanced features like burnout chart, sprint report, velocity chart etc...
- Integration with developer tools
- Available on cloud and mobile devices
- Paid software
- Many core features available only as paid add-ons
- Too many features may confuse some users in beginning

Wrike

- Available online
- Real-time project management tool
- User friendly and modern user interface
- Well integrated with Android and iPhone
- Very expensive
- Used mainly in mid-sized and large projects

Active Collab

- Interactive dashboard which provides track of all updates
- Efficient and fast task filtering feature
- Seamless and adaptive workflow
- Advanced features: Email integration, all-in-one calendar, collaborative writing etc...
- Rich features yet moderate price
- No option of sprint planning
- Lacks in customizability

Pivotal tracker

- Automatic planning option based on velocity
- Multi-project workspaces with all responsibilities visible in one screen
- Analytical representation of team health via advanced features like burnup, cycle time report, released reports etc...
- Other important features: Notifications, search, file sharing, story linking etc...
- Available on iPad
- Lot of integration options to expand functionality
- Expensive
- Difficult to use the dashboard for large teams

VersionOne

- Support for Release and Sprint planning, storyboard, taskboard and test board
- Supports frameworks like Kanban, Scaled Agile Framework etc...
- Easily integrable with other software development ecosystems
- Highly customizable
- Provides Burndown and Velocity reports
- Very helpful for remote teams
- Too many features may lead to confusion
- Very limited features in free version

Taiga

- Supports Scrum and Kanban
- Availability of Video call option
- Open source
- Easily customizable
- Elegant and intuitive user interface
- Too many functionalities for small projects

Microsoft Visual Studio Team Services

- Flexible Kanban boards
- Customizable dashboards
- Built-in scrum boards
- Support for Git Client
- Easy to set up build, test and release steps
- Available on cloud
- No support for Android or iOS
- Free version supports only basic features

Icescrum

- Visual support for all the phases of Agile Product Development
- Easy project management via insights gained through burnup and burndown charts, sprint velocity etc...
- Reports can be obtained in Excel or CSV format
- Easy online collaboration through real-time boards
- Highly integrable with other software development tools like GitLab, Slack, REST API etc...
- Great customer support team having experience in agile methodology
- Free to use with optional payment plans

Hygger

- Supports Kanban boards
- Has option to set task limits and timelines
- Option to set clear priorities regarding tasks to be taken next
- Categorisation and easy filtering of tasks using labels
- Easy to track team's efficiency using time tracking
- Availability of many ready-made templates which can be easily adopted
- Mobile version has limited features
- Multiple subscription plans of varying feature and corresponding price

Gravity

- Open source
- Clean and simple interface
- Intuitive bug tracking
- Availability of versatile labels
- Seamless integration with Google apps
- Seamless code review
- Email notifications
- Easy drag and drop editing
- Sign in through existing Google or Yahoo account

Thank you