

Scrum Methodology – How it works ?

Why its so popular and effective ?

Introduction to one of the most popular
project management methodologies
widely used in a complex environment (not
only software development)

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The essence of Scrum in 110 words

- Scrum is an **agile process (framework)** that allows the development team to focus on delivering the **highest business value** in the shortest possible time.
- It allows teams **to rapidly and repeatedly inspect and adjust** actual working software (every two weeks, up to one month). Based on „Empiricism” self managing and constantly learning teams.
- The **business sets the priorities.**(Products Owners, Stakeholders, Management) **SCRUM Team self-organize** to determine **the best way to deliver the highest priority features.**
- Every two weeks to a month **anyone can see real working software (increment and decide to release it as is or continue to enhance it for another sprint.**

Definition from Scrum Guide updated in 2020:

- „Scrum is a lightweight framework that helps people, teams and organizations **generate value** through **adaptive solutions for complex problems**.
- **Scrum is simple**. Try it as is and determine if its philosophy, theory, and structure **help to achieve goals and create value**.
- The **Scrum framework** is purposefully incomplete, only defining the parts required to implement Scrum theory. Scrum is built **upon by the collective intelligence of the people using it** rather than provide people with detailed instructions, the rules of Scrum guide their relationships and interactions.
- **Scrum** is founded on **empiricism and lean thinking**. **Empiricism** asserts that knowledge **comes from experience and making decisions based on what is observed**.
- **Lean thinking reduces waste and focuses on the essentials**. Scrum employs an **iterative, incremental** approach to **optimize predictability and to control risk**.
- Scrum engages groups of people who **collectively have all the skills and expertise to do the work** and share or acquire such skills as needed.
- Scrum combines four formal **events for inspection and adaptation** within a containing event, the Sprint. These events work because they implement the empirical Scrum pillars **of transparency, inspection, and adaptation.**„
- **4 events: Sprint Planning, Daily Scrum (Stand UP) Sprint Review, Sprint Retrospective**



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The Agile Manifesto – a statement of values

Individuals and interactions

over

Process and tools

Working software

over

**Comprehensive
documentation**

Customer collaboration

over

Contract negotiation

Responding to change

over

Following a plan

[Source: www.agilemanifesto.org](http://www.agilemanifesto.org)



Scrum framework

Roles

- Product owner
- Scrum Master
- ScrumTeam

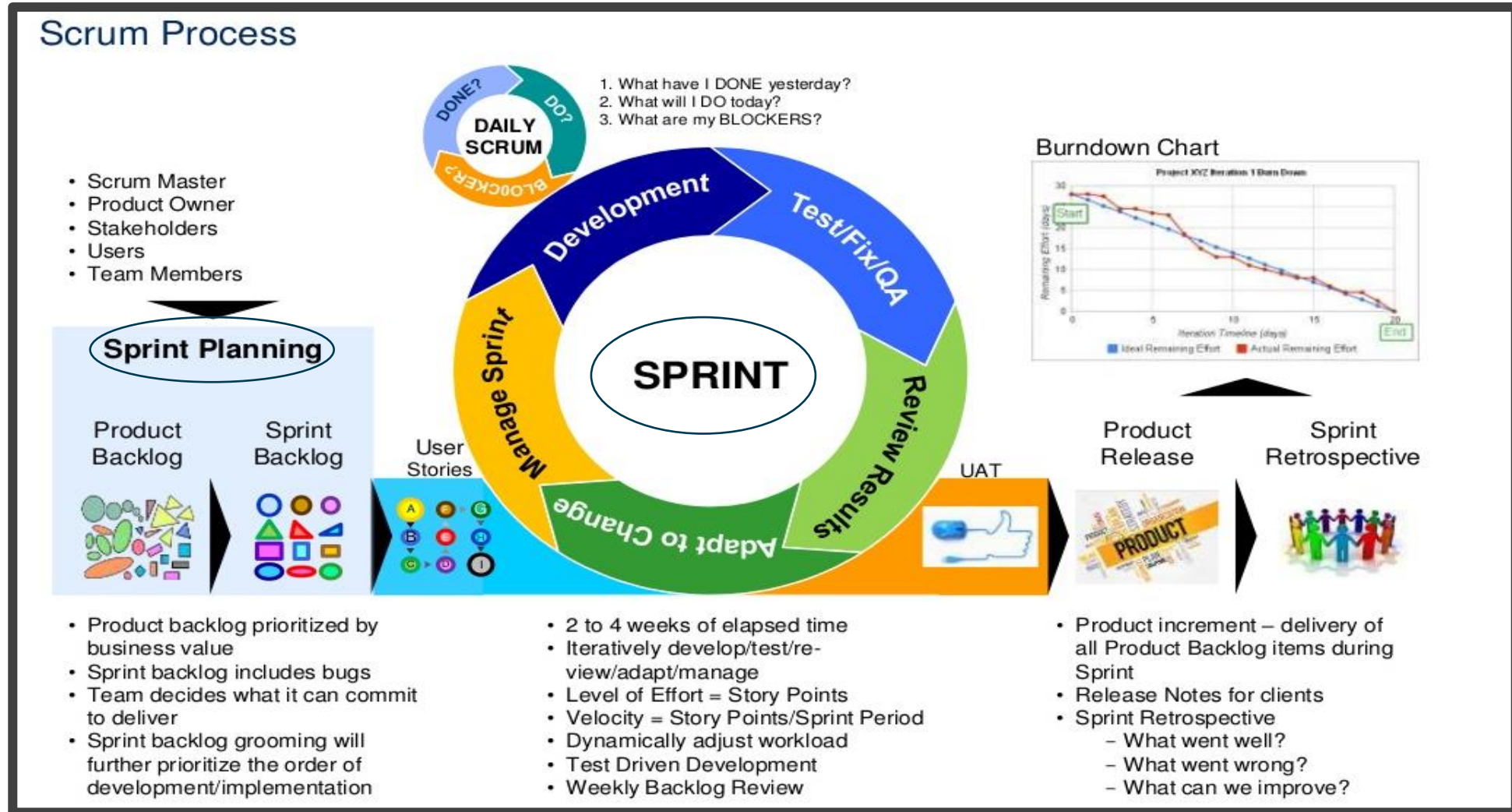
Ceremonies - events

- Sprint planning
- Sprint review
- Sprint retrospective
- Daily scrum meeting
- Stand Up

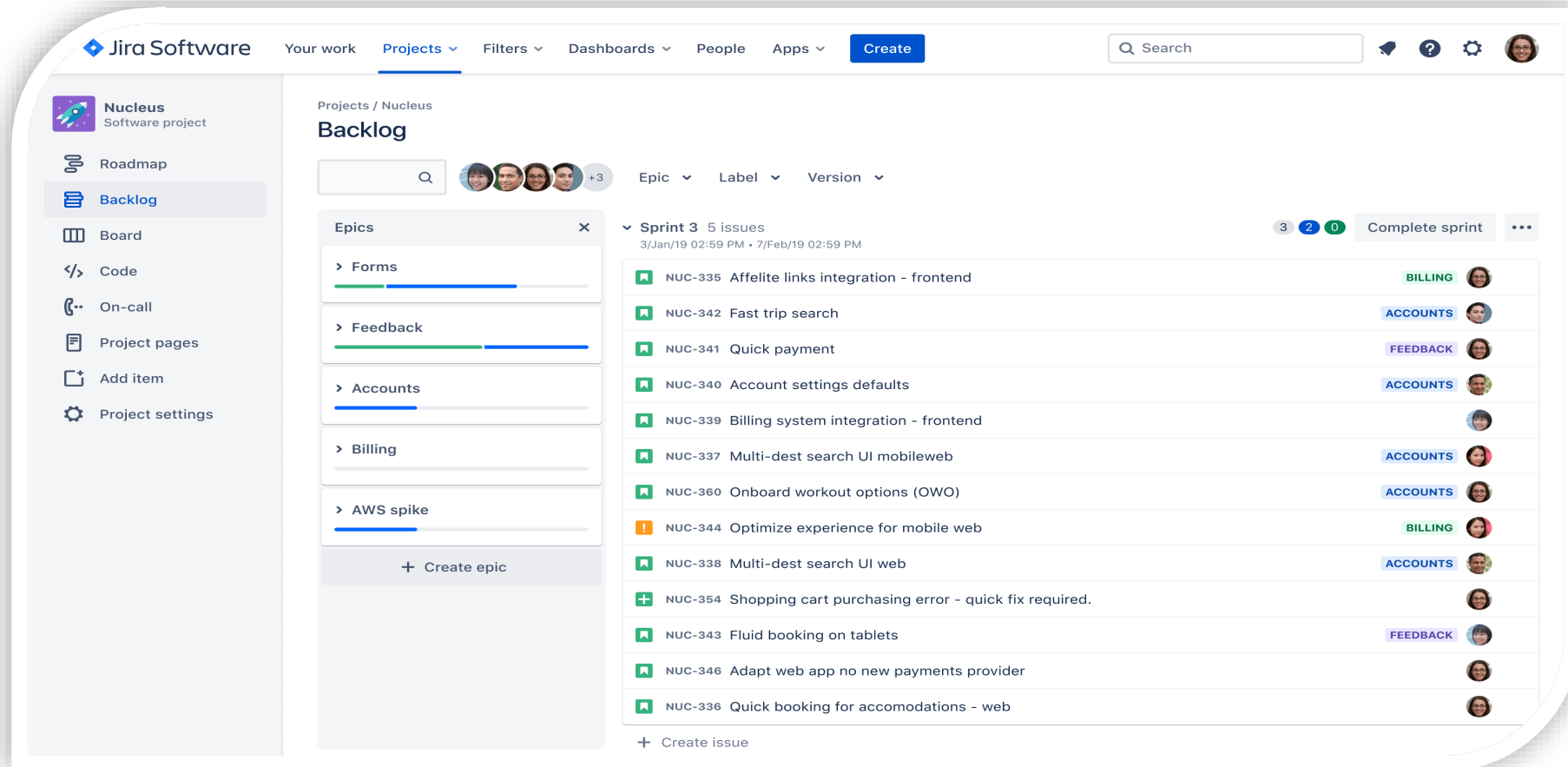
Artifacts - tools

- Product backlog
- Sprint backlog
- Burndown charts

Scrum Process Explained



Example: Jira Backlog



Jira Software Your work **Projects** Filters Dashboards People Apps **Create** Search

Nucleus
Software project

Roadmap **Backlog** Board Code On-call Project pages Add item Project settings

Projects / Nucleus
Backlog

Search [] Epic Label Version

Epics

- > Forms
- > Feedback
- > Accounts
- > Billing
- > AWS spike

+ Create epic

Sprint 3 5 issues
3/Jan/19 02:59 PM - 7/Feb/19 02:59 PM

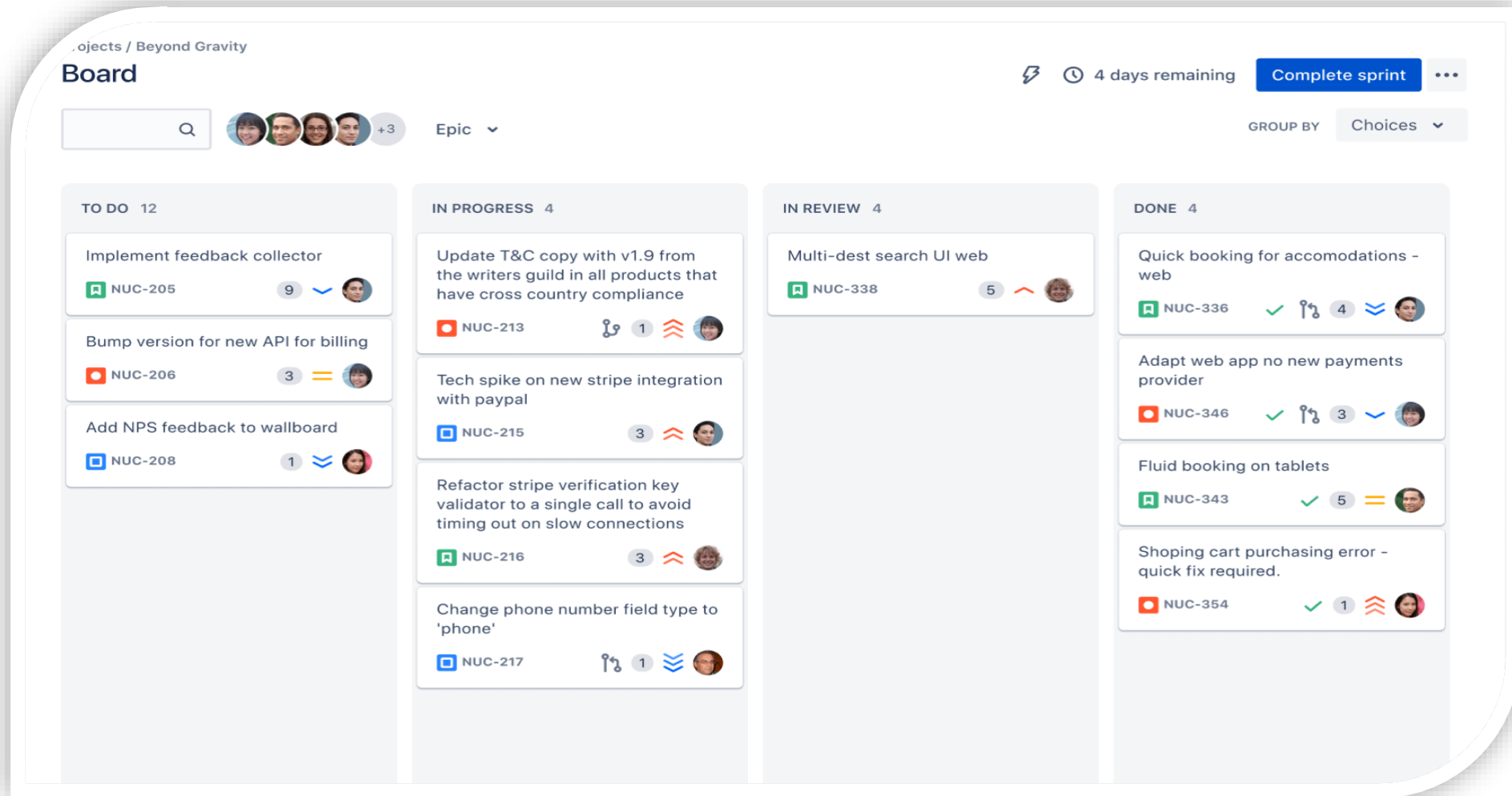
3 2 0 Complete sprint

| | | |
|---------|--|----------|
| NUC-335 | Affelite links integration - frontend | BILLING |
| NUC-342 | Fast trip search | ACCOUNTS |
| NUC-341 | Quick payment | FEEDBACK |
| NUC-340 | Account settings defaults | ACCOUNTS |
| NUC-339 | Billing system integration - frontend | |
| NUC-337 | Multi-dest search UI mobileweb | ACCOUNTS |
| NUC-360 | Onboard workout options (OWO) | ACCOUNTS |
| NUC-344 | Optimize experience for mobile web | BILLING |
| NUC-338 | Multi-dest search UI web | ACCOUNTS |
| NUC-354 | Shopping cart purchasing error - quick fix required. | |
| NUC-343 | Fluid booking on tablets | FEEDBACK |
| NUC-346 | Adapt web app no new payments provider | |
| NUC-336 | Quick booking for accomodations - web | |

+ Create issue

Source: <https://www.atlassian.com/software/jira/features/scrum-boards>

Example: Jira Scrum board



Projects / Beyond Gravity

Board

⚡ ⌚ 4 days remaining Complete sprint ⋮

GROUP BY Choices ▾

Search [] [] [] [] +3 Epic ▾

TO DO 12

- Implement feedback collector
NUC-205 9 ▾ []
- Bump version for new API for billing
NUC-206 3 = []
- Add NPS feedback to wallboard
NUC-208 1 ▾ []

IN PROGRESS 4

- Update T&C copy with v1.9 from the writers guild in all products that have cross country compliance
NUC-213 [] 1 [] []
- Tech spike on new stripe integration with paypal
NUC-215 3 [] []
- Refactor stripe verification key validator to a single call to avoid timing out on slow connections
NUC-216 3 [] []
- Change phone number field type to 'phone'
NUC-217 [] 1 [] []

IN REVIEW 4

- Multi-dest search UI web
NUC-338 5 [] []

DONE 4

- Quick booking for accomodations - web
NUC-336 [] [] 4 [] []
- Adapt web app no new payments provider
NUC-346 [] [] 3 ▾ []
- Fluid booking on tablets
NUC-343 [] [] 5 = []
- Shoping cart purchasing error - quick fix required.
NUC-354 [] [] 1 [] []

Source: <https://www.atlassian.com/software/jira/features/scrum-boards>

Scrum boards applied:

Software development

When considering the methodology, most people think of software teams building and releasing code as their main adopters.

Marketing

Marketers managing large, complex projects – such as product launches and events – involving multiple teams and skill sets. Scrum boards are a great way to slice up work related to web development, asset, and content creation, design needs, and more so that every project launches on time.

Business & HR

Hiring, staffing, and informing employees of the latest company news is an internal marketing project in itself. When it comes to updating career and company information on the website, creating internal communication hand-outs, and more, Jira scrum boards are an excellent tool to track the status of every piece of the project.

Scrum has been used for:

Commercial software
Complex platforms
In-house development
Contract development
Fixed-price projects
Financial applications
ISO - certified applications
Embedded systems
24x7 systems with 99.999%
uptime requirements –
DevOps Platforms
Marketing&HR projects

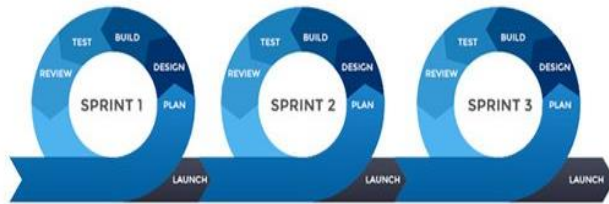
Video games development
Satellite-control software
Most complex Websites
Handheld software
Mobile phones software
Network switching applications
ISV applications
Some of the largest applications in
use
Cloud data migration
Sales processes improvements
Innovative products

Scrum has been used by:

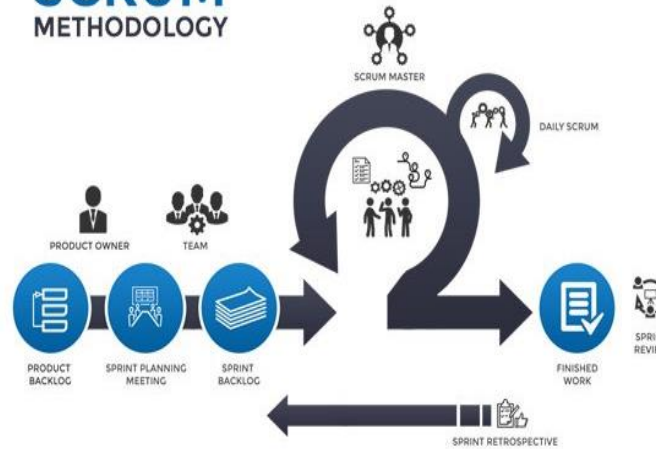
- Nielsen Media
- Airbus
- State-owned IT infrastructure agencies
- Custom Software development companies
- John Deere
- Lexis Nexis
- Philips
- Salesforce.com
- Time Warner
- Spotify
- BP
- Microsoft
- Yahoo
- Google
- Electronic Arts
- IBM
- Lockheed Martin
- Siemens
- Nokia
- Capital One
- BBC
- Amazon
- Allians

A comprehensive comparison between Agile, Scrum and Waterfall Methodology

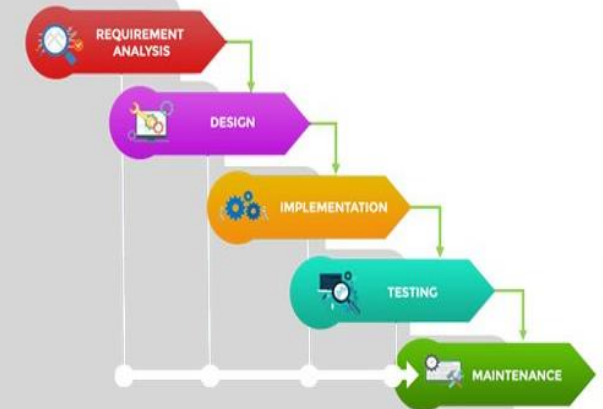
AGILE METHODOLOGY



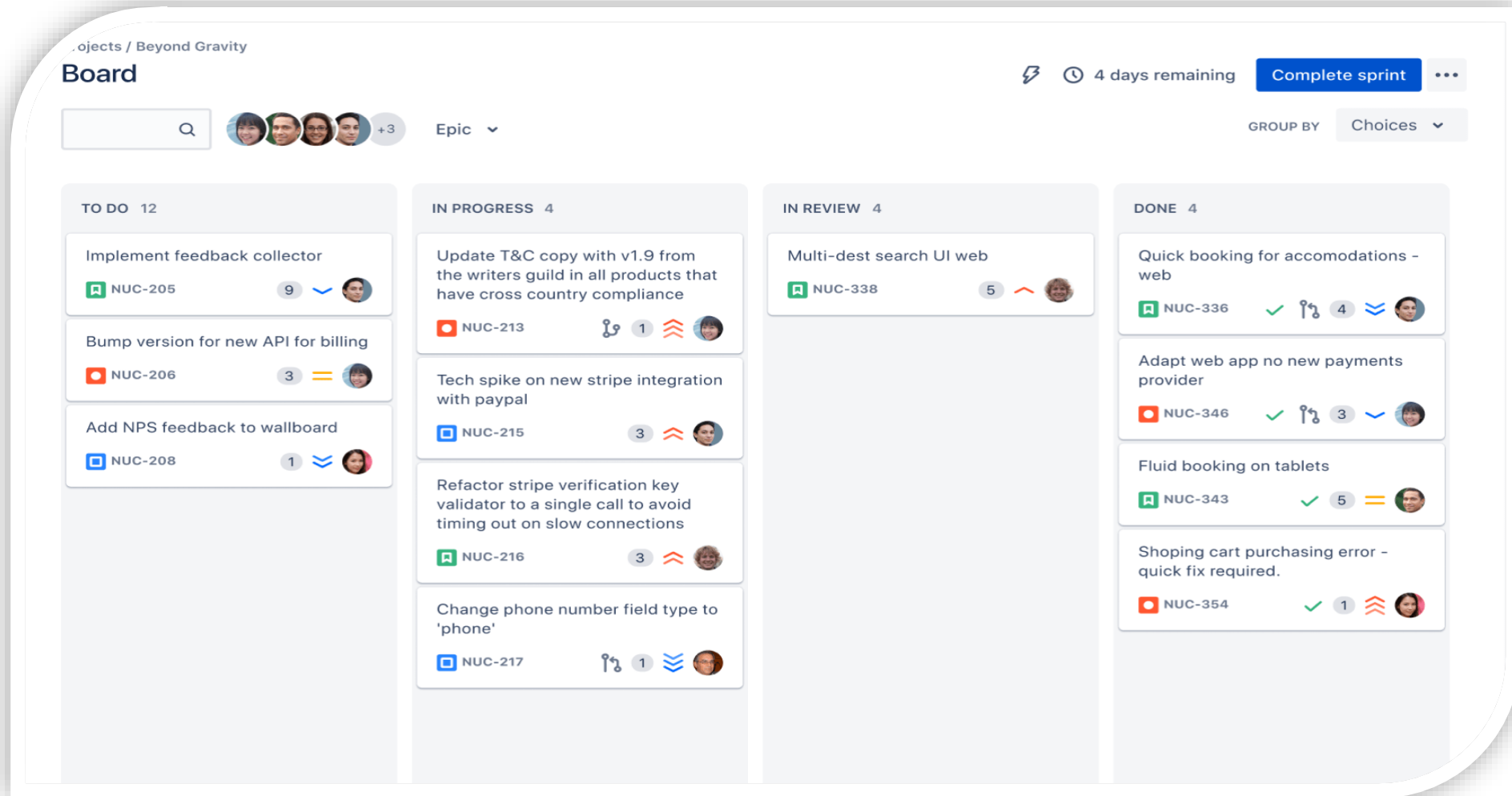
SCRUM METHODOLOGY



WATERFALL METHODOLOGY



Example: Jira Scrum board



The screenshot shows a Jira Scrum board for the project 'Beyond Gravity'. The board is organized into four columns: 'TO DO' (12 items), 'IN PROGRESS' (4 items), 'IN REVIEW' (4 items), and 'DONE' (4 items). Each item is represented by a card with a title, ID, priority, and assignee. The board also includes a search bar, a filter dropdown set to 'Epic', and a 'Complete sprint' button. The sprint is currently 4 days remaining.

Board: Beyond Gravity

4 days remaining Complete sprint

GROUP BY: Choices

TO DO 12

- Implement feedback collector (NUC-205, 9, assignee)
- Bump version for new API for billing (NUC-206, 3, assignee)
- Add NPS feedback to wallboard (NUC-208, 1, assignee)

IN PROGRESS 4

- Update T&C copy with v1.9 from the writers guild in all products that have cross country compliance (NUC-213, 1, assignee)
- Tech spike on new stripe integration with paypal (NUC-215, 3, assignee)
- Refactor stripe verification key validator to a single call to avoid timing out on slow connections (NUC-216, 3, assignee)
- Change phone number field type to 'phone' (NUC-217, 1, assignee)

IN REVIEW 4

- Multi-dest search UI web (NUC-338, 5, assignee)

DONE 4

- Quick booking for accomodations - web (NUC-336, 4, assignee)
- Adapt web app no new payments provider (NUC-346, 3, assignee)
- Fluid booking on tablets (NUC-343, 5, assignee)
- Shoping cart purchasing error - quick fix required. (NUC-354, 1, assignee)

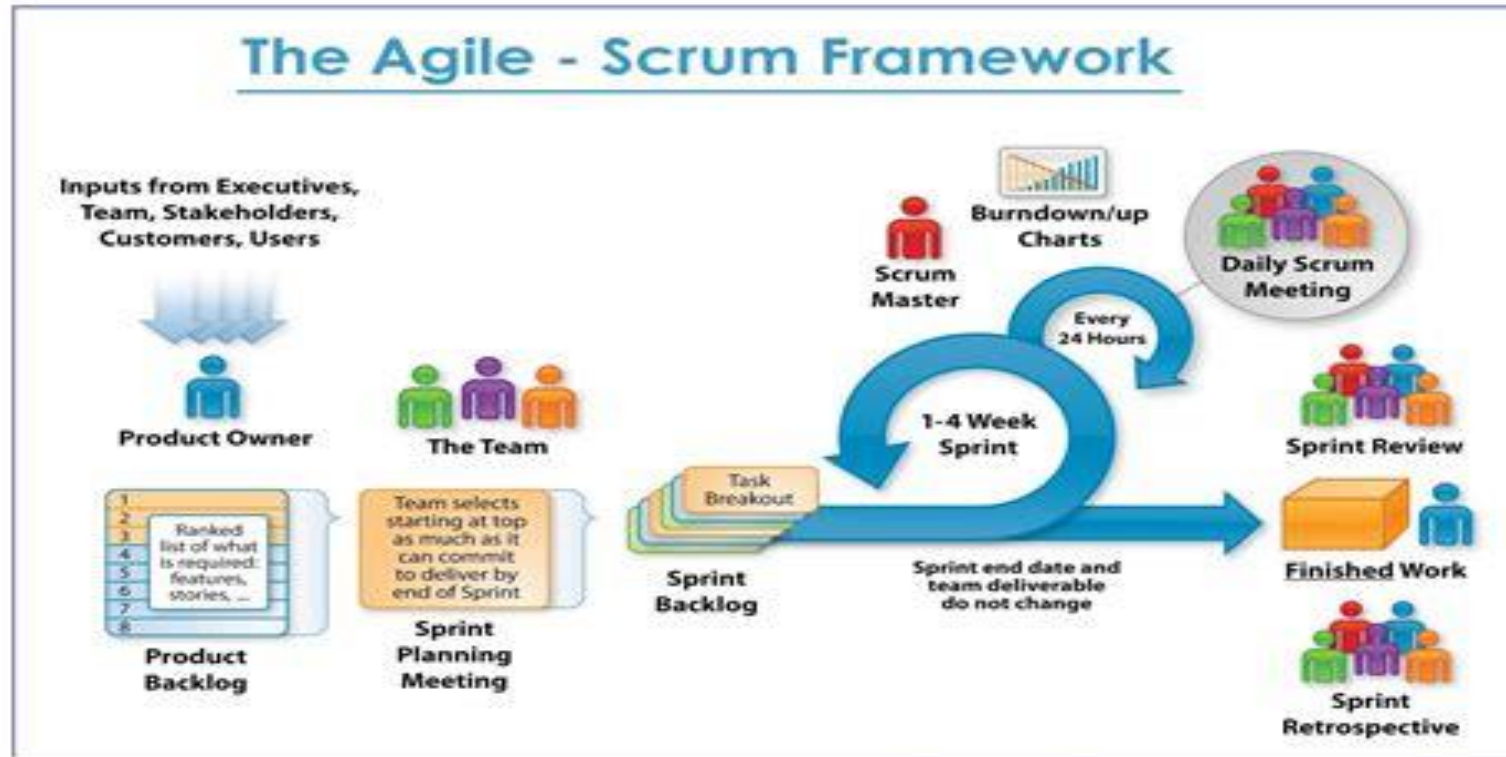
Source: <https://www.atlassian.com/software/jira/features/scrum-boards>

Summary

Scrum easily adaptable to complex projects

- multidiscipline teams
- Scalable framework – team up to 10 people
- Different teams may work on the same project backlog
- Focused on empiricism allows experiments during sprints
- The highest business value first
- Constant transparency , inspection and adaptation

Q&A session



Sources:

<https://rachael-klarsen.blogspot.com/2022/04/is-it-scrum-methodology-which-uses.html>

<https://www.scrumalliance.org/agile-organizations/how-to>

<https://scrumguides.org/index.html>

<https://www.atlassian.com/agile/scrum>

<https://www.atlassian.com/software/jira/agile#scrum>

Thank You for attention 😊

“The more inventory you have, the less likely you are to have the one part you actually need.” – Taiichi Ohno, creator of Toyota Production system (source: *Lean Thinking*)