#### Scrum has been used by every organization:

- 1. Microsoft
- 2. Yahoo
- 3. Google
- 4. Electronic Arts
- 5. IBM
- 6. Lockheed Martin
- 7. Philips
- 8. Siemens
- 9. Nokia
- 10.Capital One
- 11.BBC
- 12.Intuit

- Apple
- Nielsen Media
- First American Corelogic
- Qualcomm
- Texas Instruments
- Salesforce.com
- John Deere
- Lexis Nexis
- Sabre
- Salesforce.com
- Time Warner
- Turner Broadcasting
- Oce



### THE SCRUM SPRINT



PRODUCT OWNER

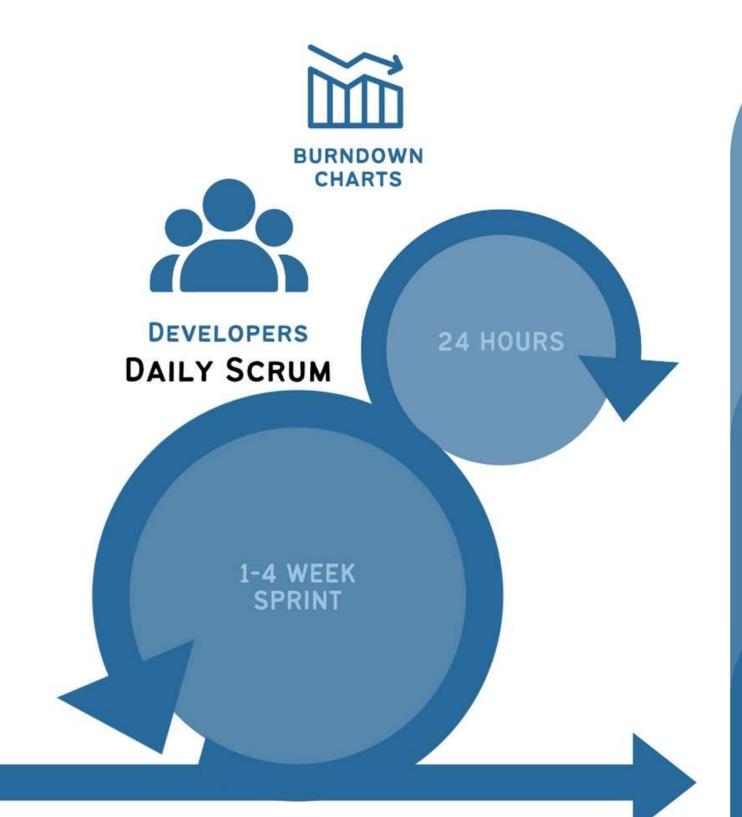


**DEVELOPERS** 











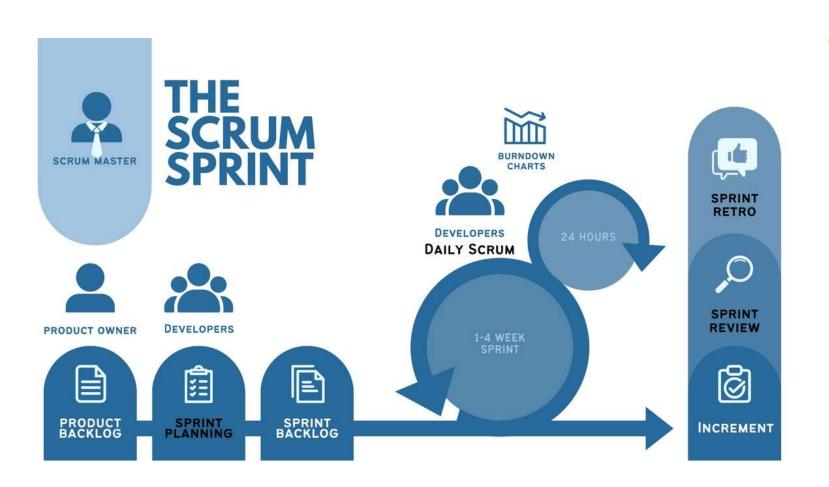


SPRINT REVIEW



INCREMENT

#### Scrum in a nutshell



- 1. Product Owner orders Product Backlog.
- 2. Scrum team chooses a <u>Sprint Goal</u> and tasks from <u>Product Backlog</u> to be developed during the next Sprint in *Sprint Planning*.
- 3. Scrum Team and stakeholders inspect the <u>increments</u> created (*Sprint Review*) and determine future adaptations for the next Sprints.
- 4. The Scrum Team review their effectiveness and quality (*Sprint Retrospective*) and make adjustments for the next Sprints. The process repeats.

#### Scrum Team



- Coaches Scrum
- Causes removal of Impediments



Value Maximizer



 Create any aspect of a usable Increment each Sprint

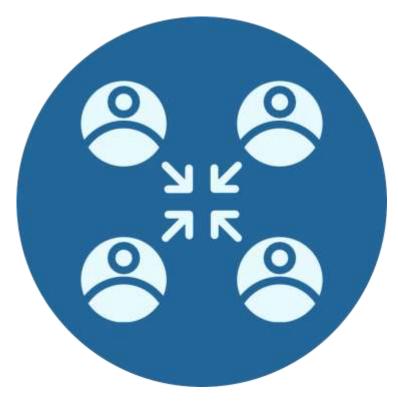
NOTE: The Scrum Team is limited to 10 or fewer members.

#### Scrum Team



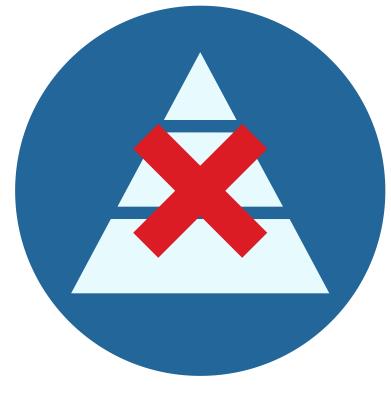
Self-managed

Internally decides who does what, when, and how.



Cross-functional

Members have all the skills necessary to create value each Sprint.



No hierarchies

It is a cohesive unit of professionals aligned to the same goals



Collective Accountability

Holding each other accountable as professionals.

**NOTE**: The Scrum Team is limited to 10 or fewer members.

#### **Scrum Events**



Sprint – max 1calendar month.

Goal is to produce usable

Increments at the end of the

Sprint.



Max 4 hours (Usually shorter for shorter Sprints).

For Scrum Team and Key Stakeholders.

To review increments and determine what is next.



Max 8 hours (Usually shorter for shorter Sprints).
The Sprint Goal is agreed upon.



Max 3 hours (Usually shorter for shorter Sprints).

For the Scrum Team.

Discuss improvements to effectiveness and quality.



Max 15 minutes.
For the Developers only.
To monitor progress towards the Sprint Goal

#### **During the Sprint**



- No changes are made that would endanger the Sprint Goal
- Quality goals do not decrease
- Developers track progress in Daily Scrums
- The Product Backlog is refined as needed
- Scope may be clarified and renegotiated between the Product Owner and Developers as more is learned.
- Only the Product Owner can cancel the Sprint.

#### **Scrum Artifacts**



The <u>Product Backlog</u> is the single source of work undertaken by the Scrum Team. The Commitment to the Product Backlog is the **Product Goal**.



The <u>Sprint Backlog</u> is a set of product backlog tasks that have been chosen to be developed during the next Sprint to meet the Sprint Goal. The Commitment to the Sprint Backlog is the **Sprint Goal**.



An Increment is a concrete stepping stone toward the Product Goal, by completing product backlog tasks during a Sprint.

The Commitment to the Increment is the **Definition of Done**.

The Definition of Done lists the agreed quality standards of increments.

#### **Scrum Artifacts**



- Only Ever One Product Backlog
- Only One Product Goal
- Items estimated by Developers
- Continuous refinement by the Scrum Team
- Product Owner's accountability.

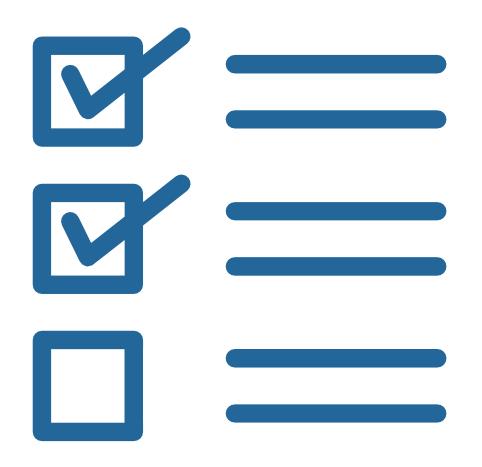


- A plan by and for the Developers
- Updated throughout the Sprint
- Developer's accountability



- Each Increment is additive to all prior Increments.
- Multiple Increments may be created within a Sprint.
- Should meet the Definition of Done.

#### **Definition of Done**



- Is a list of conditions that must be true in order to consider Increments truly done.
- Defined by the Organization if available
- If not, must be mutually defined by Scrum Teams.

# **Transparency**

## Inspection

SCRUM

## Adaption

#### 3 Pillars of Scrum

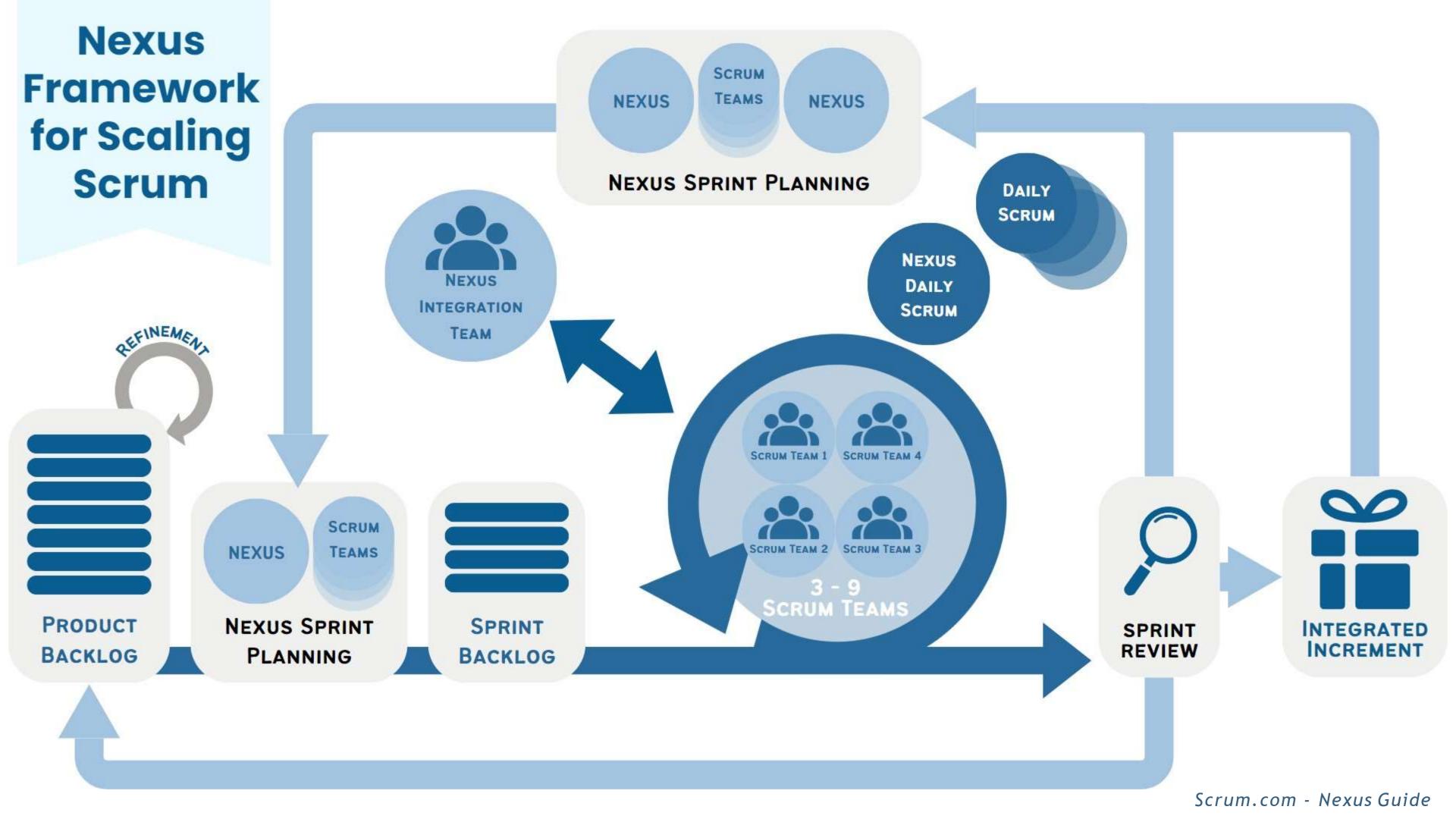
"Founded on *Lean Thinking* and *Empiricism*"

Transparency - Making work and outputs clear and visible

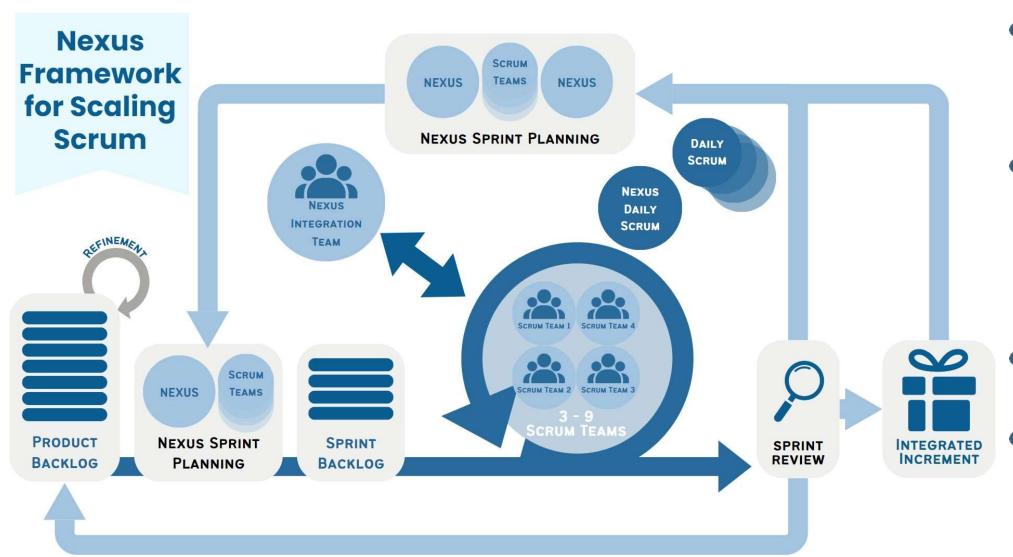
Inspection – Frequent checks on progress towards goals, to detect deviations from the path to the goal.

Adaption – Adjusting the process as soon as possible to minimize any further deviation or issues.





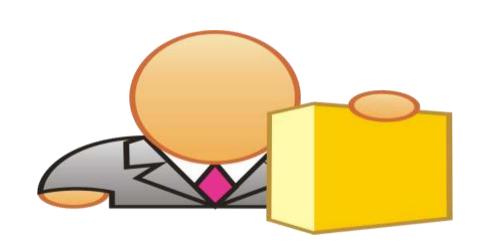
#### Scaled Scrum



- One Product Owner, One Product
   Backlog, One Product Goal at all times!
- Multiple Scrum Teams working together to create an Integrated Increment
- A Nexus Integration Team is needed.
- Don't need to Synchronize Sprints between teams
- Managing dependencies is key

#### Characteristics

- Self-organizing teams
- Product progresses in a series of month-long "sprints"
- Requirements are captured as items in a list of "product backlog"
- No specific engineering practices prescribed
- Uses generative rules to create an agile environment for delivering projects
- One of the "agile processes"



#### Product owner

- Define the features of the product
- Makes scope vs. schedule decisions
- Responsible for achieving financial goals of the project
- Prioritize the product backlog
- Adjust features and priority every sprint, as needed
- Accept or reject work results

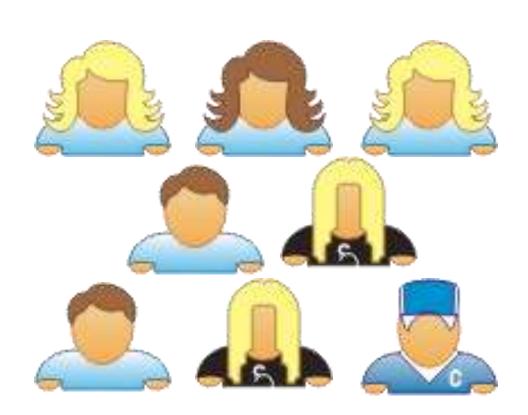


#### Scrum Master

- Responsible for enacting Scrum values and practices
- Removes impediments
- Coaches the team to their best possible performance
- •Helps improve team productivity in any way possible
- Enable close cooperation across all roles and functions
- Shield the team from external interference

#### The Team

- Typically 5-9 people
- Cross-functional:
- Members should be full-time
- May be exceptions
- Teams are self-organizing
- Ideally, no titles but rarely a possibility
- Membership should change only between sprints
- Members who are involved



### Scrum framework

#### **Ceremonies**

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

#### **Artifacts**

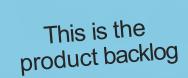
- Product backlog
- Sprint backlog
- Increment

## Sprint planning

- Team selects items from the product backlog they can commit to completing
- Sprint backlog is created
- Tasks are identified and each is estimated (1-16 hours)
- Collaboratively, not done alone by the ScrumMaster
- High-level design is considered

#### Product backlog





- The requirements
- A List of all desired work to be carried
- Ideally expressed such that each item has value to the users or customers of the product
- Prioritized by the product
- Reprioritized at the start of each Sprint

#### Managing the sprint backlog

- •Individuals sign up for work of their own choosing
- Work is never assigned
- Estimated work remaining is updated daily
- Any team member can add, delete or change the sprint backlog
- Work for the sprint emerges
- If work is unclear, define a sprint backlog item with a larger amount of time and break it down later
- Update work remaining as more becomes known

#### The daily scrum

- Parameters
- Daily
- •15-minutes
- Stand-up
- Not for problem solving
- Whole world is invited
- Only team members, ScrumMaster, product owner, can talk
- Helps avoid other unnecessary meetings

#### The sprint review

- Team presents what it accomplished during the Sprint
- Typically takes the form of a demo of new features or underlying architecture
- Informal
- 2-hour prep time rule
- No slides
- Whole team participates
- •Invite the world

## Sprint Retrospective

Periodically take a look at what is working and what is not working

- Typically around Max 3 hours (Usually shorter for shorter Sprints).
- Done after every sprint
- Whole team participates
- ScrumMaster
- Product owner
- Team
- Possibly customers and others

#### Start / Stop / Continue

- •Whole team gathers and discusses what they'd like to:
- Start Doing
- Stop Doing
- Continue Doing
- •Any previous backlogs to be executed in next sprint
- Any Customer Complaints
- Any conflicts

#### BENEFITS OF IMPLIMENTING SCRUM

- 1. All updates for each month will updated in a single file
- 2. Self monitored teams and reviewed by stakeholders every month
- 3. Smaller teams will get more focus for better communications and make work easier
- 4. Everything will be recorded in the Product Backlog by the Product Owner
- 5. There will be no blaming game as actual facts will be recorded and it will be lead to Nil conflicts with better environment
- 6. Productivity will increase due to scheduled time box meetings.
- 7. Scope for learning as there will learn from what went wrong and better for the next sprint.
- 8. Increases stakeholder engagement with respective teams
- 9. Sprint review and sprint retrospective are completed then the new sprint will commence
- 10. Sprint are fixed for one month.