



APPLYING AGILE

How to Succeed on an Agile Team



AGENDA

1

Welcome

2

What is Agility?

3

The Real World

4

The Scrum Framework

5

Other Important Concepts

6

Cheat Sheet

7

Questions?

AGILITY

noun

Ability to move quickly and easily

“though he was without formal training as dancer or athlete, his physical agility was inexhaustible”

Ability to think and understand quickly

“games teach hand-eye coordination, mental agility, and alertness”

A promotional photograph for the HGTV show 'Love It or List It'. The image features the two main hosts, Kiyohiko Otake and Christina Soledad, standing outdoors on a wooden deck. Christina, on the left, has long brown hair and is wearing a black and red patterned blazer over a black top and blue jeans. Kiyohiko, on the right, is balding with short hair on the sides, wearing a purple button-down shirt, a brown leather belt, and blue jeans. They are both smiling at the camera. The background shows a white door and some greenery. The title 'LOVE IT OR LIST IT' is overlaid in large white text, with a heart symbol in the 'O' of 'LOVE' and a dollar sign in the 'S' of 'LIST'.

LOVE IT OR LIST IT

HGTV

HOW DOES IT WORK?

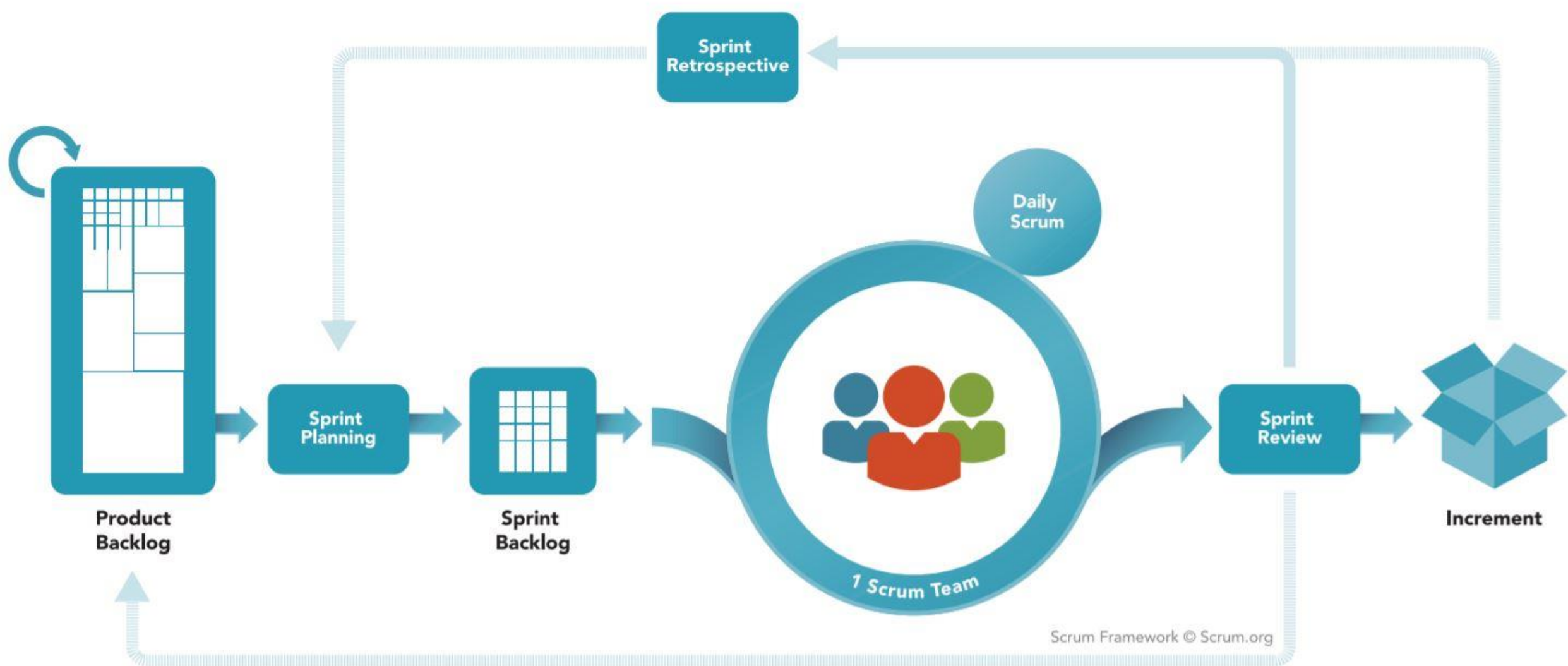
- Meet the homeowners
- Discuss their needs
- Talk about their likes & dislikes
- Determine the budget
- Designers come up with a plan
- Homeowners go away while contractors do the work
- "Big Reveal"
- Homeowner decides whether to stay or sell (all or nothing)



WOULD YOU LIKE TO MAKE THAT DECISION?

How can we make it better?

The Scrum Framework



SCRUM

noun

A framework within which people can address complex adaptive problems, while productively and creatively delivering products of the highest possible value.”

- *Lightweight*
- *Simple to understand*
- *Difficult to master*

ROLES ARTIFACTS EVENTS

The Scrum Framework

ROLES (WHO)

- Product Owner
- Development Team
- Scrum Master

ARTIFACTS (WHAT)

- Product Backlog
- Sprint Backlog
- Increment

EVENTS (HOW)

- Sprint
- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective

Product Owner

- Owns the product roadmap
- Possesses product knowledge
- Authority and courage to make product development decisions
- May answer to broader stakeholder audience
- Available for team decision-making & clarification
- Refines & orders the Product Backlog
- Determines what to release and when

Development Team

- All roles needed to create the product
- Cross-functional skillset
- Shared ownership & accountability
- Fully allocated to the team
- Self-organizing (but not always self-managing)

Scrum Master

- Upholds Scrum principles – team and organization
- Removes impediments
- Responsible for planning & reporting
- Servant Leadership role
- Helps with scaling across teams

Scrum Team



Product Owner



Scrum Master



Development Team

Product Backlog

- Ordered & estimated list of customer desires
- Ordered by priority, dependency, risk, business value...
- Level of detail driven by order
- Items small enough to be completed in a sprint with several other items

Sprint Backlog

- PBIs planned for the current sprint, plus a plan to complete those items
- Priority understood by the team
- Estimated by the Development Team
- Can be worked independently
- Each item includes criteria that defines success or completeness (Acceptance Criteria)

Increment

- The work completed within the sprint and delivered to the customer
- Meets the team's Definition of Done
- Ideally production-ready*

The Sprint

- The duration in which the increment of work is completed
- Must be one month or less
- Duration remains consistent or impacts predictability

Sprint Planning

- Plan the work to be completed during the next sprint
- Entire Scrum Team attends
- Time boxed event based on sprint length

Daily Scrum/Stand-up

- Organize around the sprint goal and planned work
- Development Team attends
- 3 questions – Yesterday's accomplishments, Today's goals, Any roadblocks?
- Time-boxed at 15 minutes

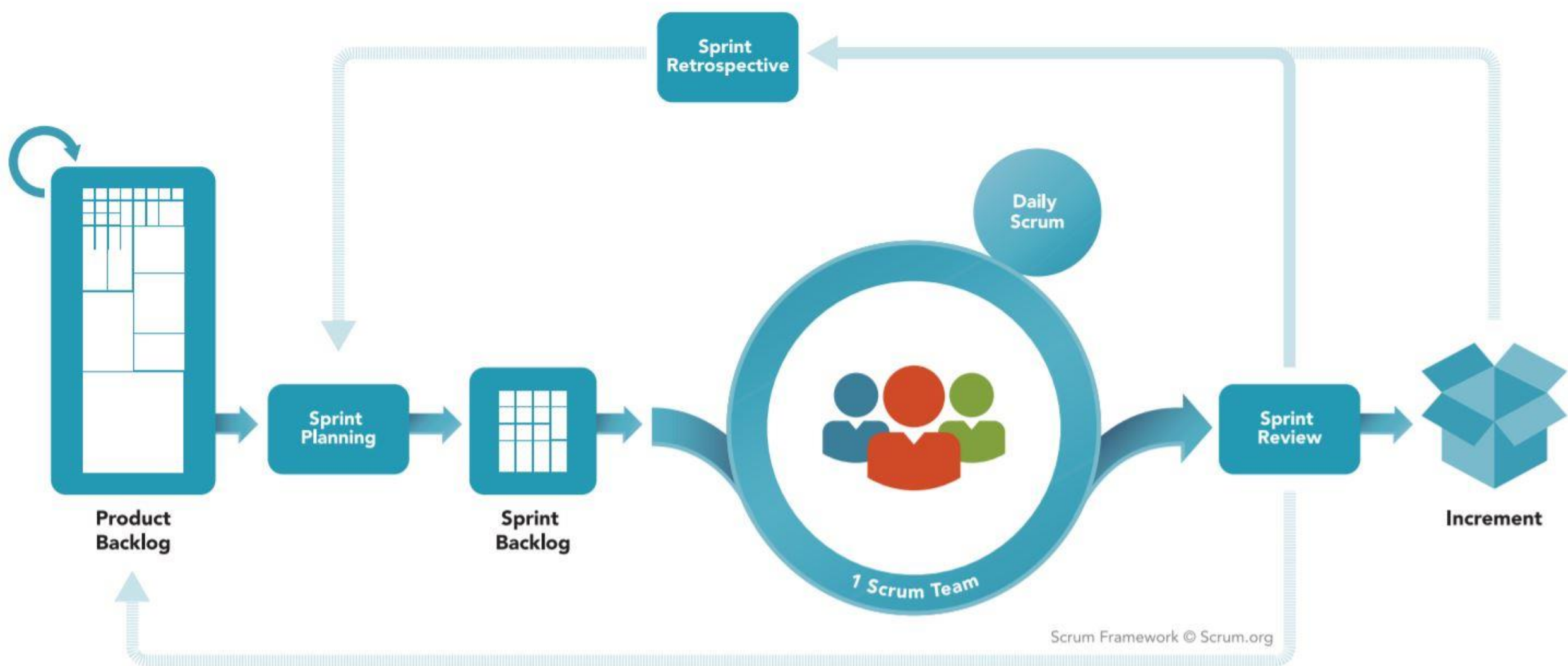
Sprint Review

- Discuss and obtain feedback on the increment
- Review progress towards the project/product roadmap
- Entire Scrum Team plus Stakeholders
- Time-boxed based on sprint length

Sprint Retrospective

- Discuss the team successes, challenges and commitments to improve
- Entire Scrum Team (**only**)
- Typically 1 hour

The Scrum Framework



PUTTING IT ALL TOGETHER

Other Important Concepts

THE SCRUM BOARD

USER STORIES

ACCEPTANCE CRITERIA

ESTIMATING

BACKLOG REFINEMENT

DEFINITION OF READY

PLANNING

DEFINITION OF DONE

The Scrum Board

- Facilitates organization around the sprint backlog
- Typically tracks the stages of progress for the work item
- Owned by the Development Team
- Highlights impediments & team discussions



User Story Creation

- Short, simple description of a feature told from the perspective of the user
- Provides the following information:
 - Who is the user? ("As a...")
 - What does the user want? ("I want...")
 - Why? ("So that...")
- Small enough to be completed in one sprint
- Contains Acceptance Criteria

As a <type of user>,
I want to <some goal>,
so that <some reason>.

Acceptance Criteria

- A condition (or set of conditions) that is met to determine when a user story is complete
- Defined prior to estimation and development of the user story
- Gherkin format:
 - Given...
 - When...
 - Then...

Estimation

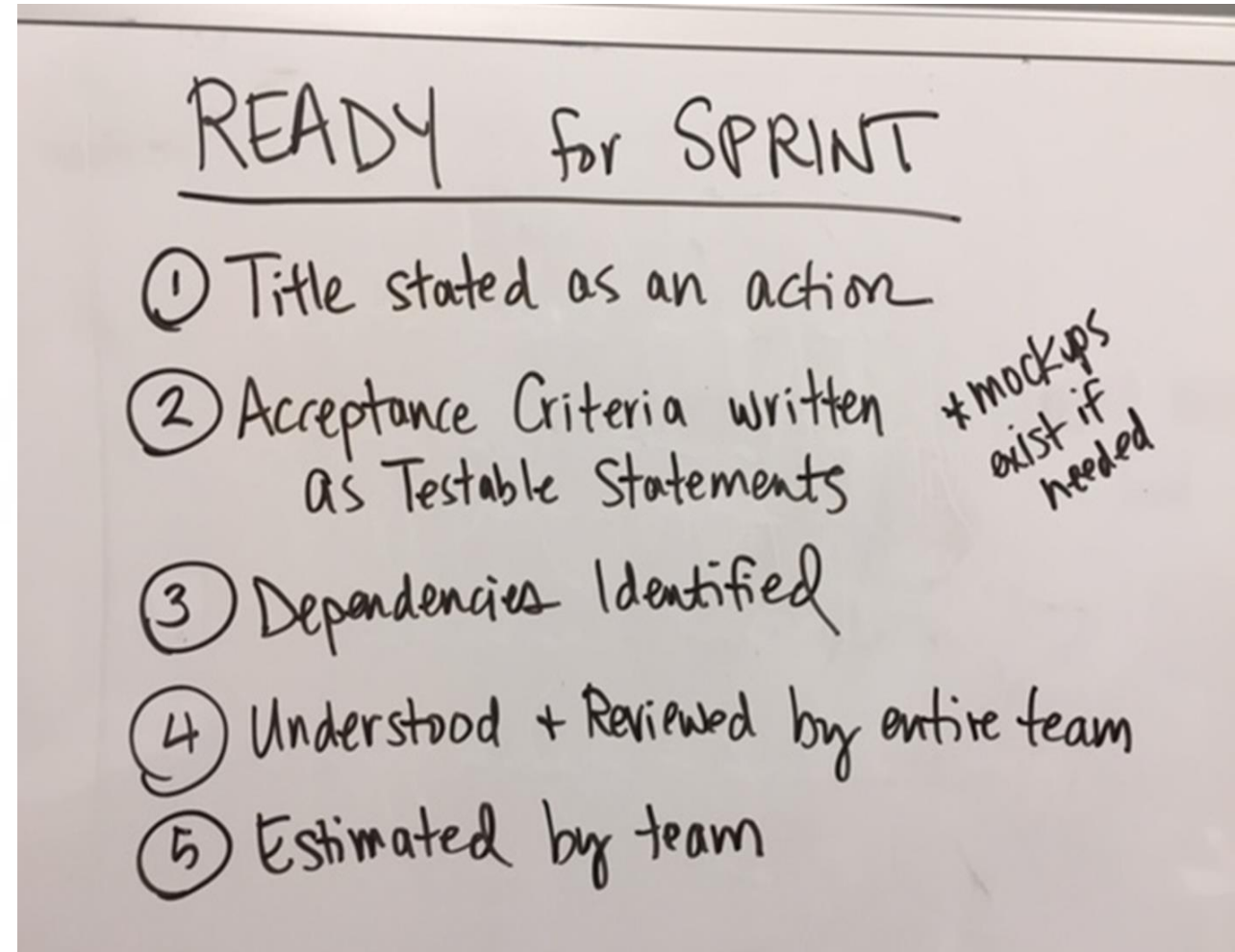
- Representation of **relative complexity** and value
- Unique to one team with greater consistency across that team over time
- Generally measured in ambiguous units such as story points (Fibonacci scale) or T-shirt sizes

Product Backlog Refinement

- Discuss and dissect the Product Backlog to a workable state
 - Decompose User Stories
 - Add detail to Acceptance Criteria
 - Update estimates
 - Identify new PBIs
- Validate current order
 - Top items well understood
- Up to 10% of the team's time!

Definition of Ready

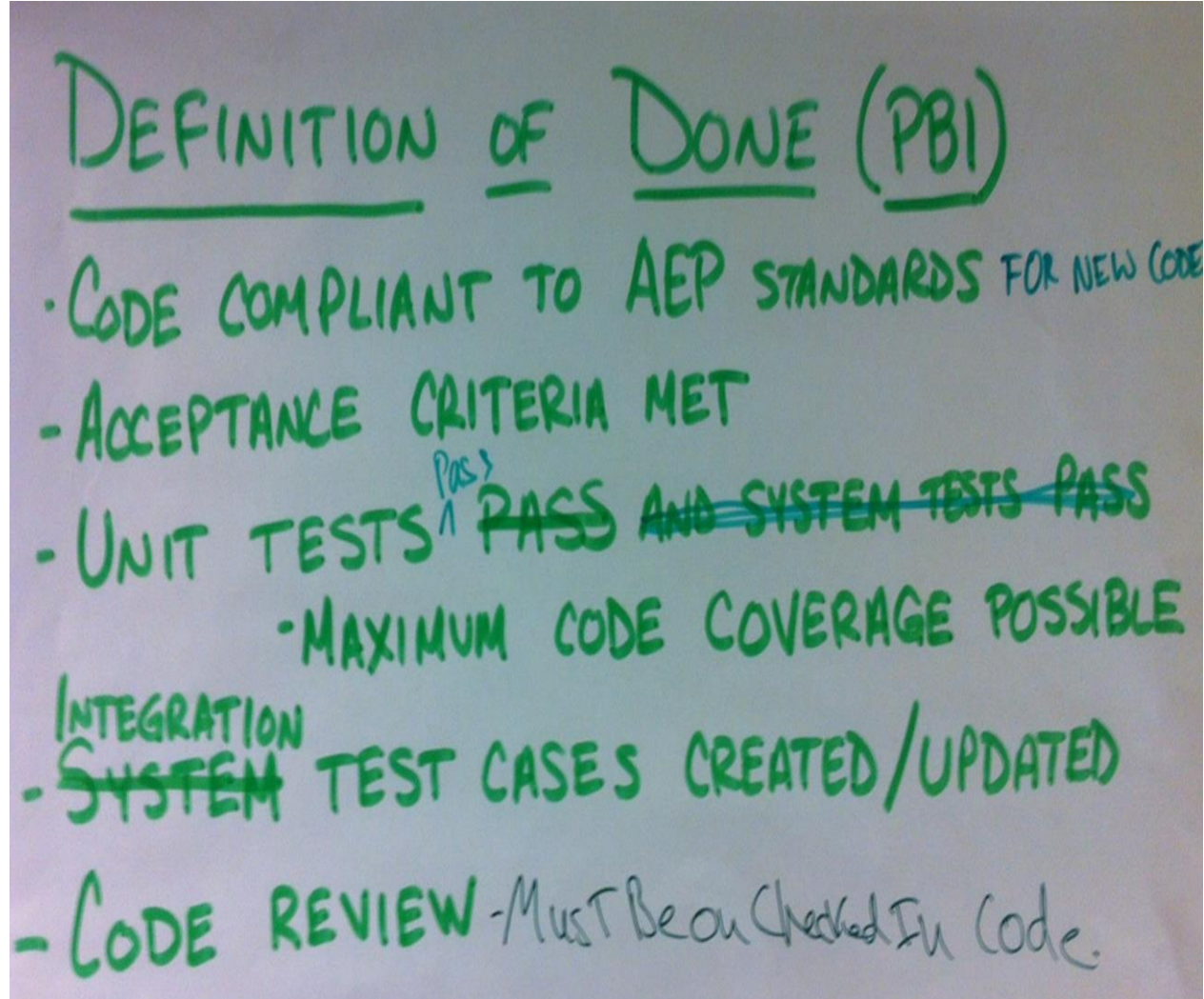
- Simple checklist to define when a PBI is ready to be planned into a sprint
- **Defined by the Team**
- Quality gate for requirements
- Reduces churn during Sprint Planning
- Assists with planning future sprints



Planning

- Entire Scrum Team collaborates to forecast how much work can be completed during the next sprint
 - WHAT -- Highest priority Product Backlog Items (as determined by the Product Owner)
 - Should meet the team's Definition of Ready
 - HOW MUCH -- Team's **velocity** is used to determine how much work can be completed ("yesterday's weather")
 - HOW -- Team decides how to complete this work, resulting in the Sprint Backlog

Definition of Done



- Checklist to confirm the completion of work
- **Defined by the Team**
- Quality gate for completed PBI's
- Must be well understood by the Product Owner
- Helps to:
 - Reduce surprises during user testing
 - Build quality into the product during Sprints rather than testing for it at the end

A promotional photograph for the HGTV show 'Love It or List It'. The image features the two main hosts, Kiyohiko Otake and Christina Soledad, standing outdoors on a wooden deck. Christina, on the left, has long brown hair and is wearing a black and red patterned blazer over a black top and blue jeans. Kiyohiko, on the right, is balding with short hair on the sides and is wearing a purple button-down shirt, a brown leather belt, and blue jeans. They are both smiling at the camera. The background shows a white door and some greenery. Overlaid on the center of the image is the show's title in large, white, bold, sans-serif capital letters. The word 'LOVE' has a heart shape inside the letter 'O'. The word 'LIST' has a dollar sign (\$) inside the letter 'I'.

LOVE IT OR LIST IT

The HGTV logo, consisting of the letters 'HGTV' in a bold, white, sans-serif font, positioned above a stylized white house icon.

HGTV

Roles



Product Owner (PO)

- Authority to make product decisions
- Available for team decision-making
- Answers to stakeholder audience



Development Team

- Contains all roles needed to create the product (e.g. Dev, BA, QA)
- Cross-functional skill set
- Shared ownership & accountability



Scrum Master

- Scrum facilitator, not manager
- Removes impediments
- "Servant Leader"



Stakeholders

- Person with vested interest and/or stake in the success of the product

Scrum Artifacts



Product Backlog

Product Backlog

- Ordered & est. list of customer desires
- Level of detail driven by order
- Product Owner responsible for priority



Sprint Backlog

Sprint Backlog

- PBI committed to current sprint(s), including Acceptance Criteria (AC)

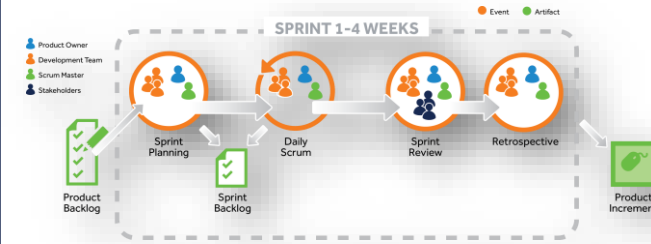


Product Increment

Product Increment

- Work completed within sprint meets Definition of Done (DoD)

Scrum Process



Scrum Events

The Sprint

- Duration of time in which increment of work is to be completed
- Typically range between 2-4 weeks

Sprint Planning Meeting

- Scrum team meets to define work to be completed during upcoming sprint
- Length of meeting determined by length of sprint

Daily Scrum / Stand-up

- Timeboxed event, typically 15min in length
- Team answers 3 questions – Yesterday's accomplishments? Today's Goals? Roadblocks?

Sprint Review

- Scrum team obtains feedback on increment from Product Owner and Stakeholder(s)
- Length of review determined by length of sprint

Sprint Retrospective

- Scrum team reflects on successes, challenges and opportunities for improvement
- Team commits 1-2 goals to include in next sprint

Terminology

User Stories

- Description of features from users POV

Acceptance Criteria

- A condition (or set of conditions) that when met qualify a user story as being completed

Definition of Ready

- Checklist to define when a PBI is workable

Definition of Done

- Checklist to verify the completion of work

Backlog Refinement

- Planning the Product Backlog to a workable prioritized state.

Product Backlog Item (PBI)

- Items that make-up the Product Backlog

Relative Estimating

- Estimating size of one item by comparing it to that of others.

Story Points

- Unit of measurement to represent the size of the user story

Sprint Goal

- What the team wants to achieve during the sprint

3 Pillars of Agile

Transparency



Inspection



Adaptation



Agile Manifesto

- Individuals **over** Process and tools
- Working software **over** comprehensive documentation
- Customer collaboration **over** contract negotiations
- Responding to change **over** following plan

*That is, while there is value in the items on the right, we value the items on the left **More**.*

User Stories

- **I** – Independent
- **N** – Negotiable
- **V** – Valuable
- **E** – Estimatable
- **S** – Small
- **T** – Testable

As a (USER)
I want to (DO THIS)
so that I can (ACHIEVE THAT)

Story Points

There are many tools available for assigning story points through relative estimating.

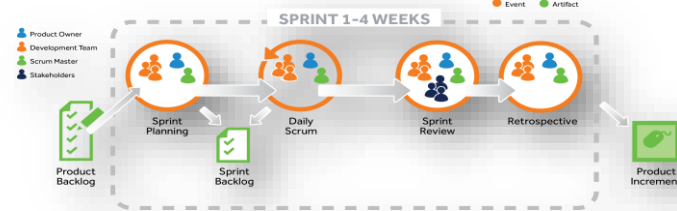
Fibonacci Scale



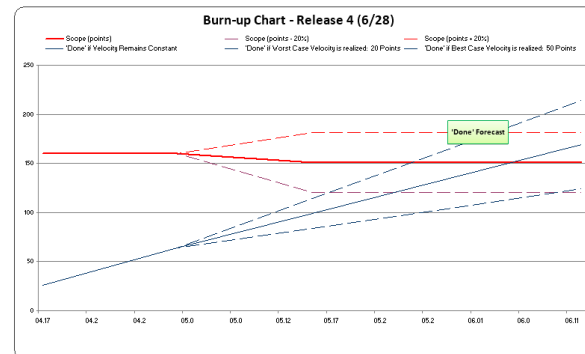
T-Shirt Sizing



Scrum Process



Release Burn-up



Planning & Measurement

- **Velocity** - points completed within a Sprint
- **Scope Burn Down** - trending of completed points during a Sprint for use by the Development Team
- **Release Burn Up** - trending of team velocity against scope for a planned release
- **Budget Burn Up** - trending of team velocity against budget for a planned release

QUESTIONS?

Kelly Fricky

Agile Coach/Scrum Master

216.538.7595

kfricky@cardinalsolutions.com