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Introduction to Scrum

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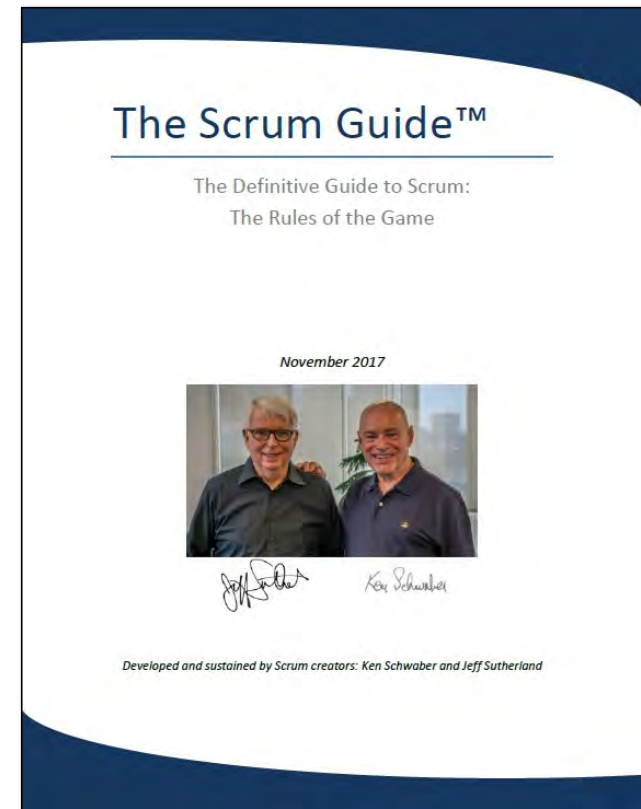

http://bit.ly/1eL0t4C

Team Formation

- Identify yourself by competency:
  - ⭐ Knows QA/testing
  - ⭐ Knows architecture/design
  - ⭐ Knows database development
  - ⭐ Knows programming
  - ⭐ Knows Scrum/Agile
- Form into cross-functional teams
- Co-locate your team
- Pick a team mascot (real or fictitious animal)

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The Scrum Guide

- Documents the Scrum framework
  - Official rules of Scrum
- Maintained by Ken Schwaber and Jeff Sutherland
- http://www.scrumguides.org
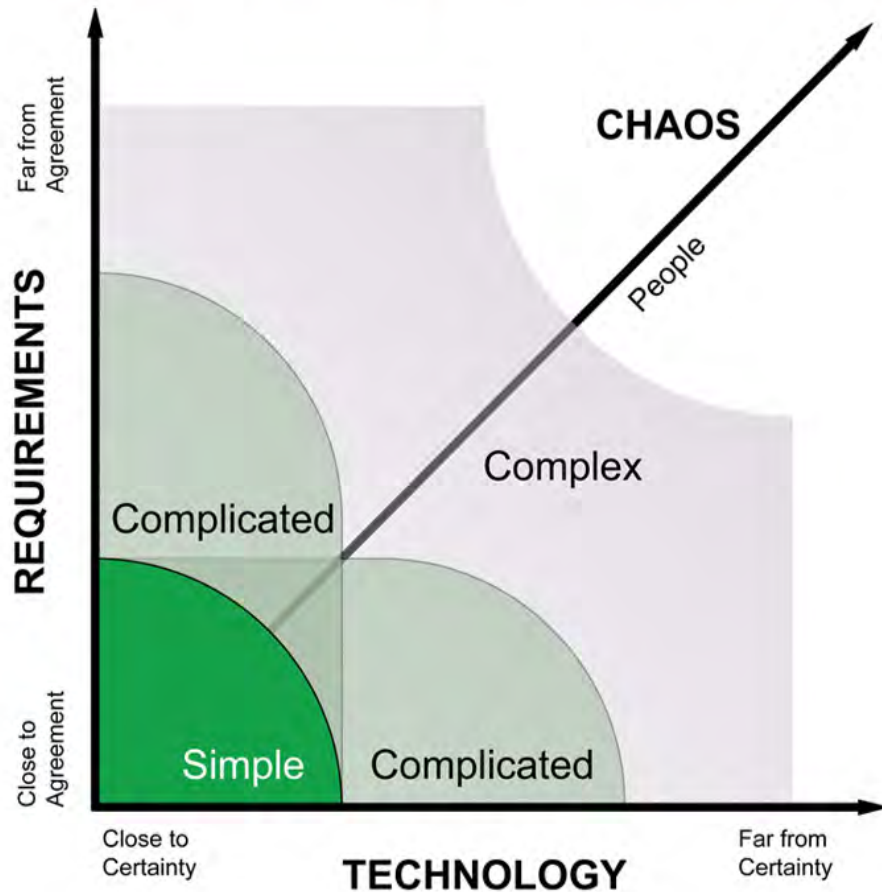
The Agile Manifesto Says it All ...

- Successful Scrum teams embrace the Agile values upon which Scrum is based:
  - Individuals and interactions <u>over</u> processes and tools
  - Working software <u>over</u> comprehensive documentation
  - Customer collaboration <u>over</u> contract negotiation
  - Responding to change <u>over</u> following a plan

  http://agilemanifesto.org

Scrum is ...

- A framework for developing and sustaining complex products
  - <u>Example</u>: software development
- Lightweight
- Simple to understand
- Extremely difficult to master

The Complexity Of Software Development

Simple
Everything is known
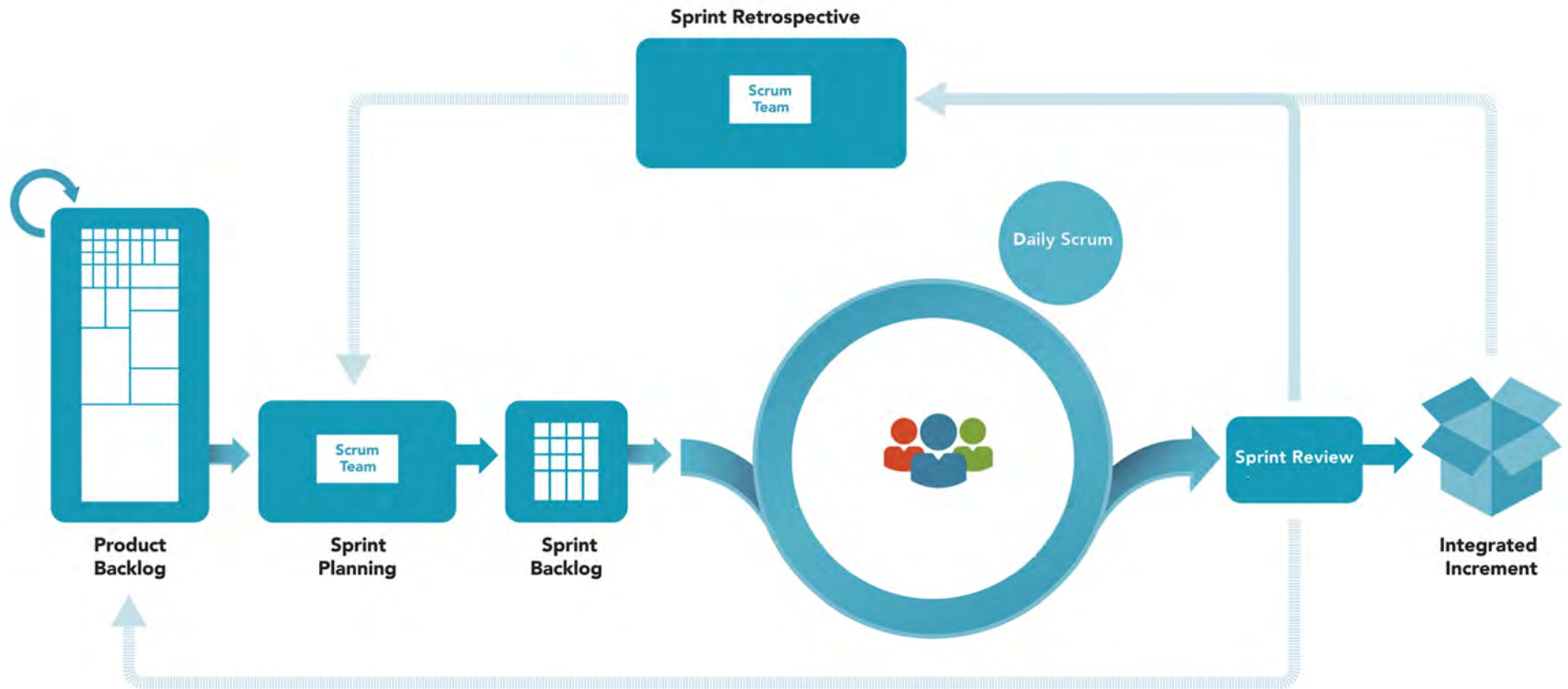
Complicated
More is known than unknown

Complex
More is unknown than known

Chaotic
Very little is known

Source: Ralph Stacey, University of Hertfordshire

The Scrum Process

Scrum Master

- The Scrum Master is responsible for ensuring Scrum is understood and enacted

  - Scrum Masters do this by ensuring that the Scrum Team adheres to Scrum theory, practices, and rules
  - The Scrum Master is a servant-leader for the Scrum Team

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Select someone on your team
to play the role of Scrum Master

Development Team

- The Development Team consists of professionals who do the work of delivering a potentially releasable Increment of "Done" product at the end of each Sprint

  - Only members of the Development Team create the Increment.

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Product Owner

- The Product Owner is responsible for maximizing the value of the product and the work of the Development Team

  - How this is done may vary widely across organizations, Scrum Teams, and individuals
  - The Product Owner is the sole person responsible for managing the Product Backlog

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Select someone on your team
to play the role of Product Owner

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The Product Owner is Key

- The Product Owner role
  - Has the most responsibility
  - Is the hardest role to fill
  - Is the most demanding role

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Select someone on your team
to play the role of Product Owner

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The Product Owner Ensures the Product Backlog ...

- Contains clearly expressed items
- Lists the business value of each item
- Contains the "what" and not the "how"
- Is ordered to best achieve goals/missions
- Shows what the team will work on next
- Is visible, transparent, and clear to all

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It's a List of "Desirements"

- The Product Backlog contains many things
  - Features
  - Enhancements
  - Behaviors
  - User stories
  - Bugs/defects
  - Use cases
  - Scenarios
- Be careful: Some desirements are actually acceptance criteria or tasks

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Review the items in
your Product Backlog

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The *User Story* Format …

- A descriptive way to write user stories:
  - As a (role) I want (something) so that (benefit)
- Examples:
  - As a visitor to the Tailspin Toys website,
    I want to see a list of recent tweets,
    So that I know that Tailspin and it's products are alive and well
- Note: The user story format will work for most PBIs, but not all

Acceptance Criteria

- Acceptance Criteria *are* the requirements
  - They enumerate what the Product Owner expects and what the Development Team needs to accomplish

You'll Want to Avoid …

- Too much up-front documentation/design
- Specifying "how" the PBI should be implemented
- Specifying a plan, tasks, test cases, etc.
  - You should wait until the Sprint where you forecasted implementing the PBI

Traditional Estimation

- Each item in the Product Backlog is unique
  - It's difficult to estimate something that is being built for the first time
  - Traditional estimation approaches won't work

Agile Estimation

- To be more accurate, be less precise
  - Estimate smaller things (tasks) in hours
  - Estimate larger things (PBIs/Bugs) in something less precise
- You should use an abstract unit of measure
  - T-shirt sizes (S, M, L, XL)
  - Fibonacci, story points, acorns, kazoobies, Vicodin

Agile Estimation – Who Estimates?

- The whole development team participates
  - The Product Owner and Scrum Master do not (unless they are also Development Team members)

Agile Estimation – When to Estimate?

- Estimate as late as is responsible
  - Early estimates are less accurate than later ones
- Scrum offers two formal opportunities for estimation: Sprint Planning and Product Backlog refinement
  - Tip: It's better to do the bulk of your estimation during Product Backlog refining so that Sprint Planning can focus on forecasting and building a plan to implement the work

Agile Estimation – What to Estimate?

- Estimating undesirable PBIs is waste
  - Wait until larger (Epic) Product Backlog Items are decomposed
  - Wait until the Product Owner orders (prioritizes) the Product Backlog
  - Note: sometimes the Product Owner needs a rough estimate to help make the prioritization decision

Estimation is Not a Silver Bullet

- Agile estimation techniques won't remove uncertainty from early estimates
  - They will improve your accuracy as the project proceeds
  - This is because Agile estimation methods take actual work into account as Sprints are completed

Refining the Product Backlog

- Refining is the act of adding detail, estimates, and order to items in the Product Backlog
  - This is an ongoing process in which the Product Owner and the Development Team collaborate on the details of Product Backlog items
- The Scrum Guide says refining can (should) take up to 10% of the length of Sprint
  - Budget the time, schedule the meeting, and attend

Refine the items in your Product Backlog

Done();

(thank you)

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