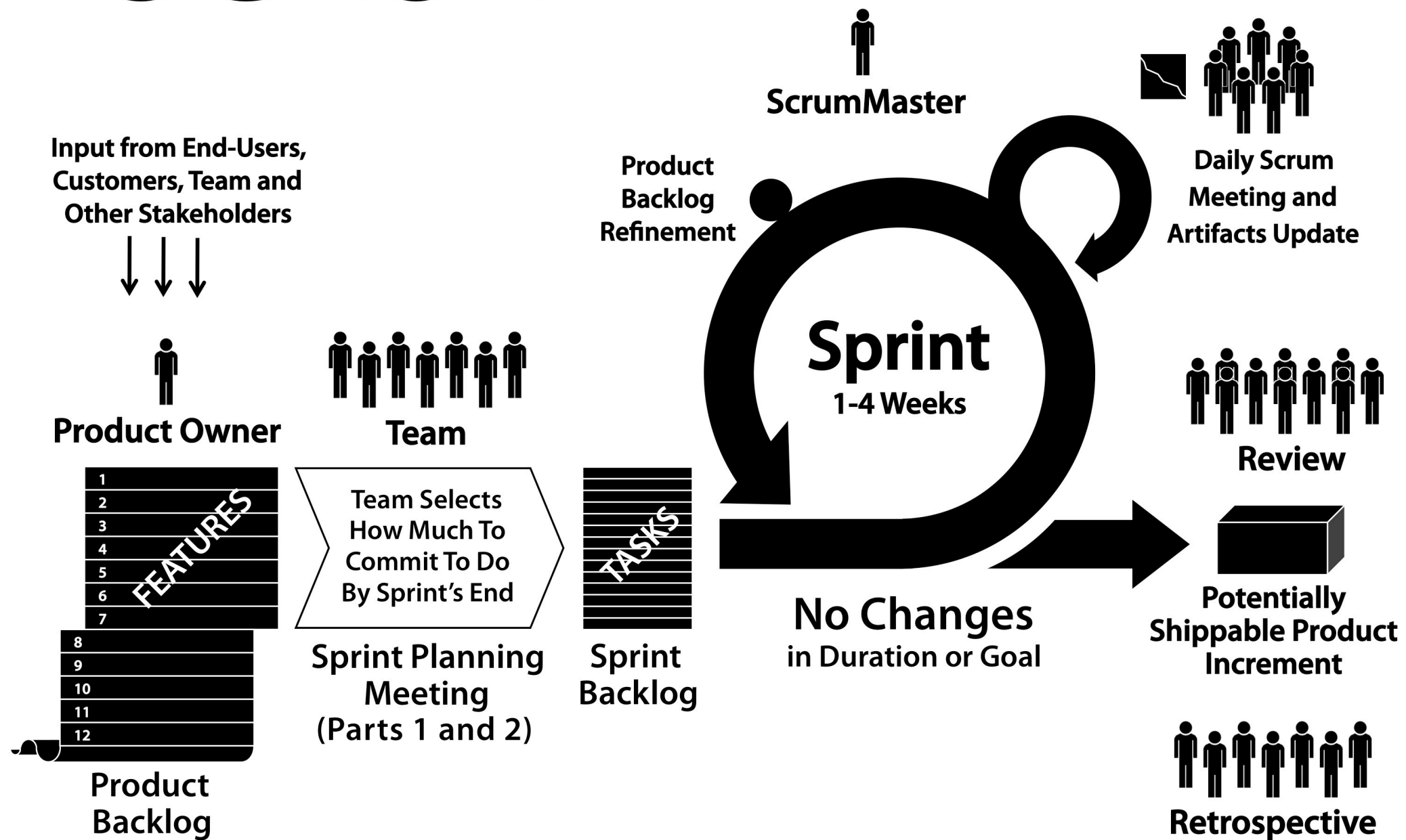# SCRUM

an introduction

Contents

1. Introduction

2. Roles

3. Artifacts

4. Activities / Meetings

5. Our process

1. Introduction

- Scrum is a framework for building a product following the values of the agile manifesto

- Scrum is a team process - trust in the team

- inspect and adapt

SCRUM

Input from End-Users, Customers, Team and Other Stakeholders

Product Owner

Team

ScrumMaster

Product Backlog Refinement

Daily Scrum Meeting and Artifacts Update

Sprint
1-4 Weeks

Review

FEATURES
1
2
3
4
5
6
7
8
9
10
11
12

Product Backlog

Team Selects How Much To Commit To Do By Sprint's End

Sprint Planning Meeting (Parts 1 and 2)

TASKS

Sprint Backlog

No Changes in Duration or Goal

Potentially Shippable Product Increment

Retrospective

2. Roles

- Product Owner

- (Development) Team Member

- Scrum Master

Product Owner (PO)

- typically the person closest to the "business side" - manages the stakeholders of the project

- responsible for drawing out the most valuable possible product - has the vision

- maintains the Product Backlog and knows what the priorities are

- decides WHAT the Development Team should do next

Development Team

- cross-functional group of people with all skills available

- self-organized

- responsible for accomplishing the Sprint goal

- forecast how much they can do in the Sprint and decide HOW to do the work

Scrum Master

- "servant leader" helping the Team follow their process (supports PO and Team)

- cares for removing impediments to the team's progress and protects the Team from internal and external distractions

- responsible for ensuring that Scrum is understood

3. Artifacts

- Product Backlog

- Sprint Backlog

- Product Increment

Product Backlog

- ordered list of ideas for the product (e.g. User Stories)

- each item includes a description and estimate, acceptance tests are recommended

- maintained by the Product Owner

Sprint Backlog

- ordered list of refined PBacklog items (tasks) chosen for the current Sprint

- maintained by the Dev Team

Product Increment

- every Sprint produces a product increment

- must meet acceptance criteria (Definition of Done)

- each component of it is acceptable to the PO

4. Activities / Meetings

- Sprint Planning I + II

- Daily Scrum

- Sprint Review

- Sprint Retrospective

- Product Backlog Refinement

Sprint Planning

- select and understand the work to be done in the upcoming Sprint, result: Sprint Backlog

- define length of upcoming Sprint (1-4 weeks)

- two parts:

  Planning I: determine WHAT work will be completed in Sprint

  Planning II: determine HOW the work will be accomplished

- ⏰ max. 2h per Sprint week at the beginning of the Sprint

Sprint Planning I - WHAT

- PO presents the relevant PBacklog items to the Team and whole Team gets to a common understanding of the work to be done

- rough estimation of the items (S, M, L)

- Sprint commitment: Team decides on how much work can fit into the Sprint

- attendees: whole Scrum Team (PO, Scrum Master, Dev Team)

Sprint Planning II - HOW

- Dev Team decides on HOW to produce the next product increment (according to Definition of Done)

- break down of PB items into small dev tasks (Sprint Backlog)

- Estimation of the tasks (hours/days)

- attendees: Dev Team, Scrum Master, PO should be readily available

Daily Scrum

- communication meeting for brief clarifying questions (no discussions!)

- share information on

  - what has been accomplished since last Daily Scrum
  - what is planed to accomplish till next Daily Scrum
  - are there any impediments

- max. 15min, same time and place every day

- attendees: whole Scrum Team

Sprint Review

- discussion about the Product Increment completed during Sprint (e.g. demonstration)

⏰ max. 1h per Sprint week at the end of the Sprint

- attendees: whole Scrum Team, Stakeholders may

Sprint Retrospective

- review how things went with respect to

    - the process

    - the relationships among people

    - the tools

- result: plan for improvement

- ⏰ max. 1h per Sprint week at the end of the Sprint

- attendees: whole Scrum Team
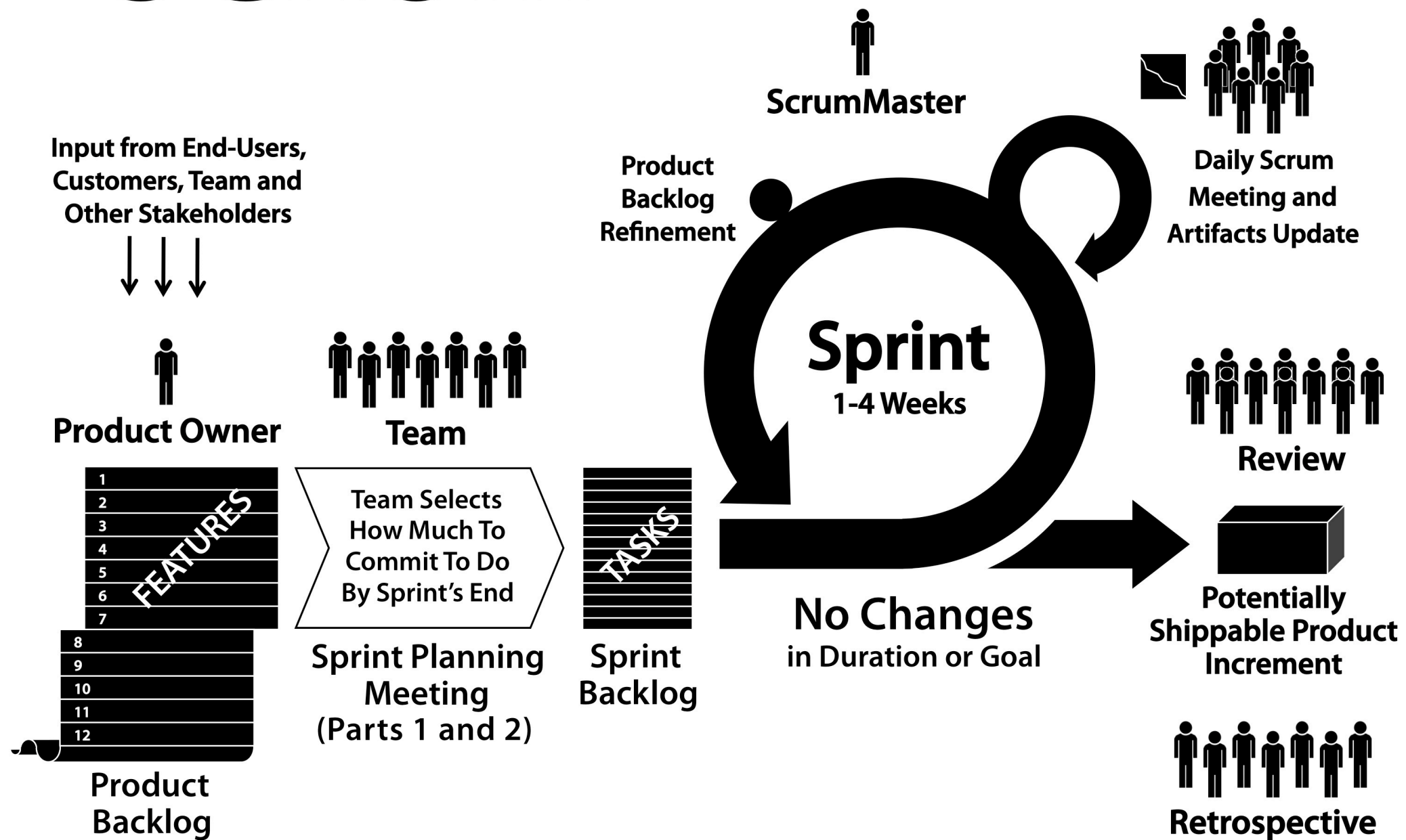
Product Backlog Refinement

- serves as preparation for upcoming Sprint

- deals with keeping Product Backlog up to date

  - adjust order, remove / add items

  - split items into smaller items / merge into larger

  - estimate items

⏰ during Sprint

- attendees: PO and ideally all the Team members or at least a representative for each skill

SCRUM

Input from End-Users, Customers, Team and Other Stakeholders

↓ ↓ ↓

Product Owner

Team

ScrumMaster

Product Backlog Refinement

Sprint
1-4 Weeks

Daily Scrum Meeting and Artifacts Update

FEATURES

1
2
3
4
5
6
7
8
9
10
11
12

Product Backlog

Team Selects How Much To Commit To Do By Sprint's End

Sprint Planning Meeting (Parts 1 and 2)

TASKS

Sprint Backlog

No Changes in Duration or Goal

Review

Potentially Shippable Product Increment

Retrospective

5. Our Process

- agreement on...
  - team roles
    - PO: _
    - Scrum Master: _
    - Dev Team: _
  - sprint length
  - tools, tracking

Definition of Done

- Team wide shared understanding of what *done* means

- evolved by the whole team

- defines e.g. that the Product Increment...

  - is of high enough quality to be shippable
  - includes the functionality of all previous PIs
  - is fully tested

User Story

- technique for representing P.Backlog items

- describes new or changed functionality that will be valuable to an external stakeholder

- contains:

  - description (e.g. "*As a <type of user> I want <some goal> so that <some reason>*")

  - conversation about the story - details!

  - acceptance tests (used to determine when a story is complete)

Agile Manifesto

- **Individuals and interactions** over process and tools

- **Working software** over comprehensive documentation

- **Customer collaboration** over contract negotiation

- **Responding to change** over following the plan