



THOUGHTFOCUS

# Agile Methodology

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## Agenda

- Agile Manifesto & Principles
- Scrum & Scrum Roles
- Scrum Ceremonies
- User Story & Acceptance Criteria
- DoD & DoR
- Estimation Techniques
- Metrics: Burn Down & Burn Up Chart, Velocity

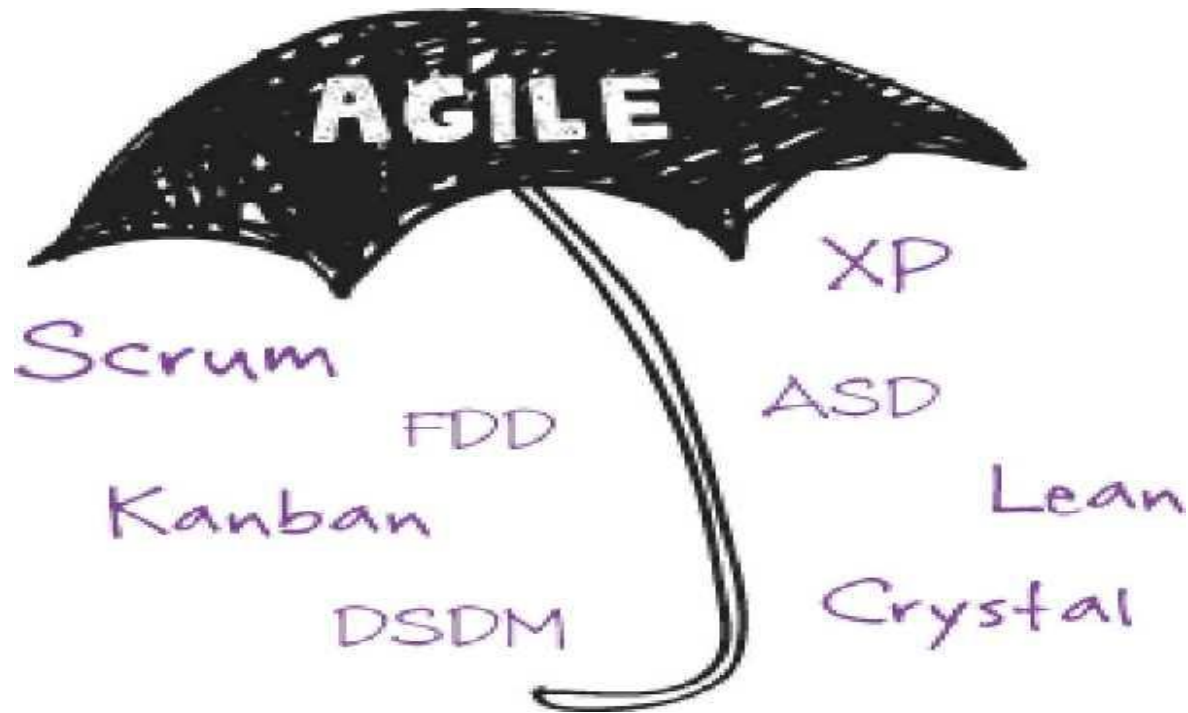
Let's get started



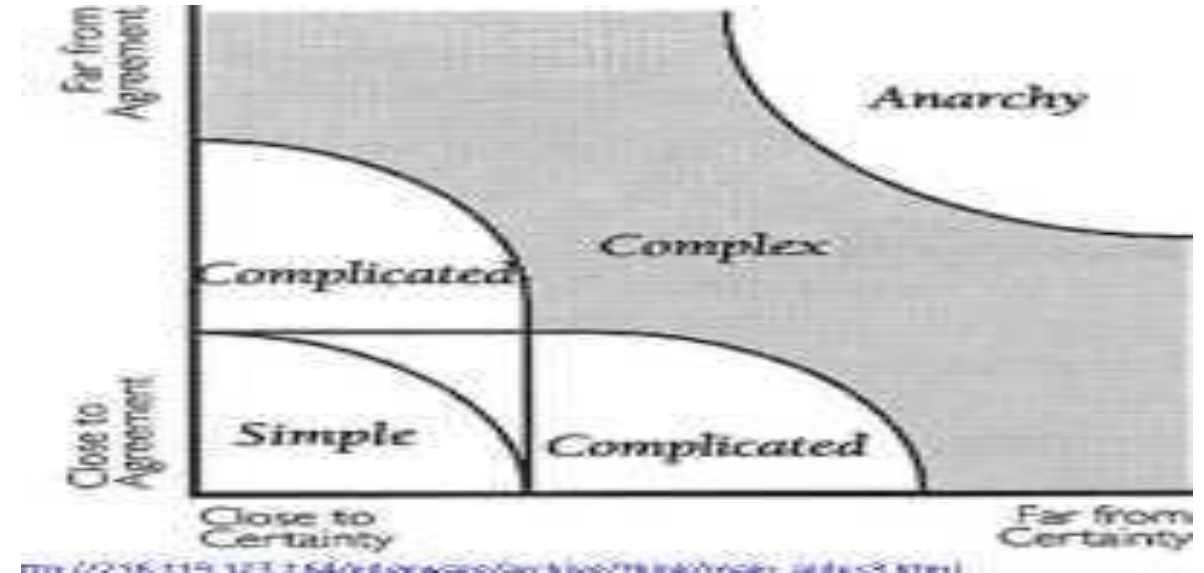
# 01 / Agile Introduction

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## What and Why Agile?



**Agile is a mindset- a set of values and principles.**



- Agile Frameworks like Scrum are better suited to deal with Complex problems where there is lot of ambiguity and would need inspect, adapt cycles to shape the product. Scrum can be used in Simple, Complicated problems as well. However, Scrum may not be effective while dealing with anarchy systems

Individuals, Interactions **OVER** Processes and Tools

Working software **OVER** comprehensive documentation

Customer collaboration **OVER** contract negotiation

Change to respond **OVER** following a plan

# Agile Principles

1. Our highest priority is to **satisfy the customer** through early and continuous delivery of valuable software.
2. **Welcome changing requirements**, even late in development. Agile processes harness change for the customer's competitive advantage
3. **Deliver working software frequently**, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Businesspeople and developers must **work together daily** throughout the project.
5. **Build** projects around **motivated individuals**. Give them the environment and support they need and **trust** them to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is **face-to-face conversation**.
7. **Working software** is the primary measure of progress.
8. **Agile processes promote sustainable development**. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9. **Continuous attention** to technical excellence and good design enhances agility.
10. **Simplicity**—the art of maximizing the amount of work not done—is essential.
11. The best architectures, requirements, and designs emerge from **self-organizing teams**.
12. At regular intervals, the team reflects on **how to become more effective**, then tunes and adjusts its behavior accordingly.

# Scrum Framework

## The Agile: Scrum Framework at a glance

Inputs from Executives,  
Team, Stakeholders,  
Customers, Users



Product Owner



The Team



Product Backlog



Sprint Planning Meeting



Sprint Backlog



2 Week Sprint



Scrum Master



Burndown/up Charts

Every 24 Hours



Daily Scrum Meeting



Sprint Review



Finished Work



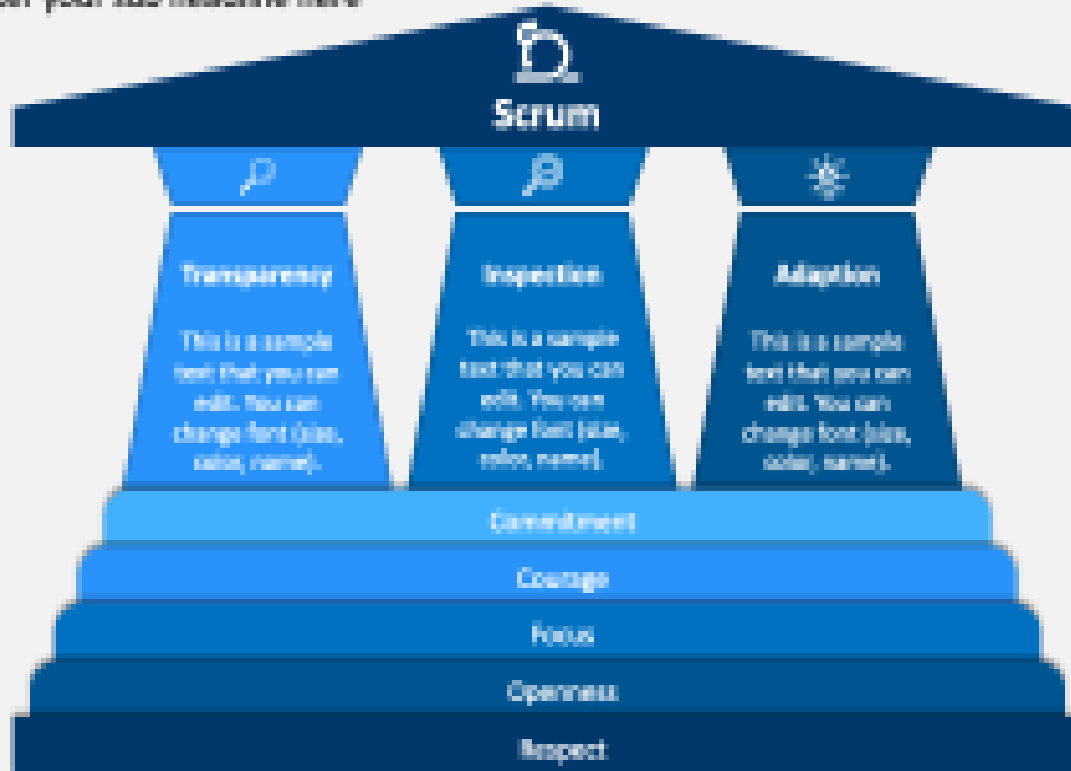
Sprint Retrospective

**Scrum** is a development framework based on **empirical process** control wherein **self organizing and cross functional teams** deliver potentially shippable **product increment** every thirty days or less. Scrum employs **iterative and incremental approach** to **optimize value delivery and to manage risks**.

# Pillars of Scrum

## PILLARS OF SCRUM

Enter your sub headline here



Scrum is founded on empiricism and the three pillars of empiricism are **transparency, inspection, adaptation**. The values that make a scrum team successful are **Focus, Openness, Respect, Courage, and Commitment**.



- **Scrum roles:**

- Product Owner
- Scrum Master
- Development Team

- **Scrum Ceremonies:**

- Product Backlog Refinement
- Sprint planning
- Sprint Retrospective
- Daily Scrum
- Sprint review

- **Artifacts:**

- Product Backlog
- Sprint Backlog
- Product Increment

# Scrum Role: Product Owner

## Responsibilities



- is one person, not a committee or group of people
- Have product vision
- Owns Budget and Responsible for the success of the Product.
- Part of Scrum Team - closely works with the Development Team and ScrumMaster throughout the Sprint.
- Owns Product Backlog and directs Product development through Product Backlog prioritization.
- Strives to maximize the value delivered by the Development Team each Sprint.
- Ensures Product Backlog is visible, transparent and clear to all and shows what Scrum Team will work on next.

# Scrum Role: Scrum Master

## Responsibilities

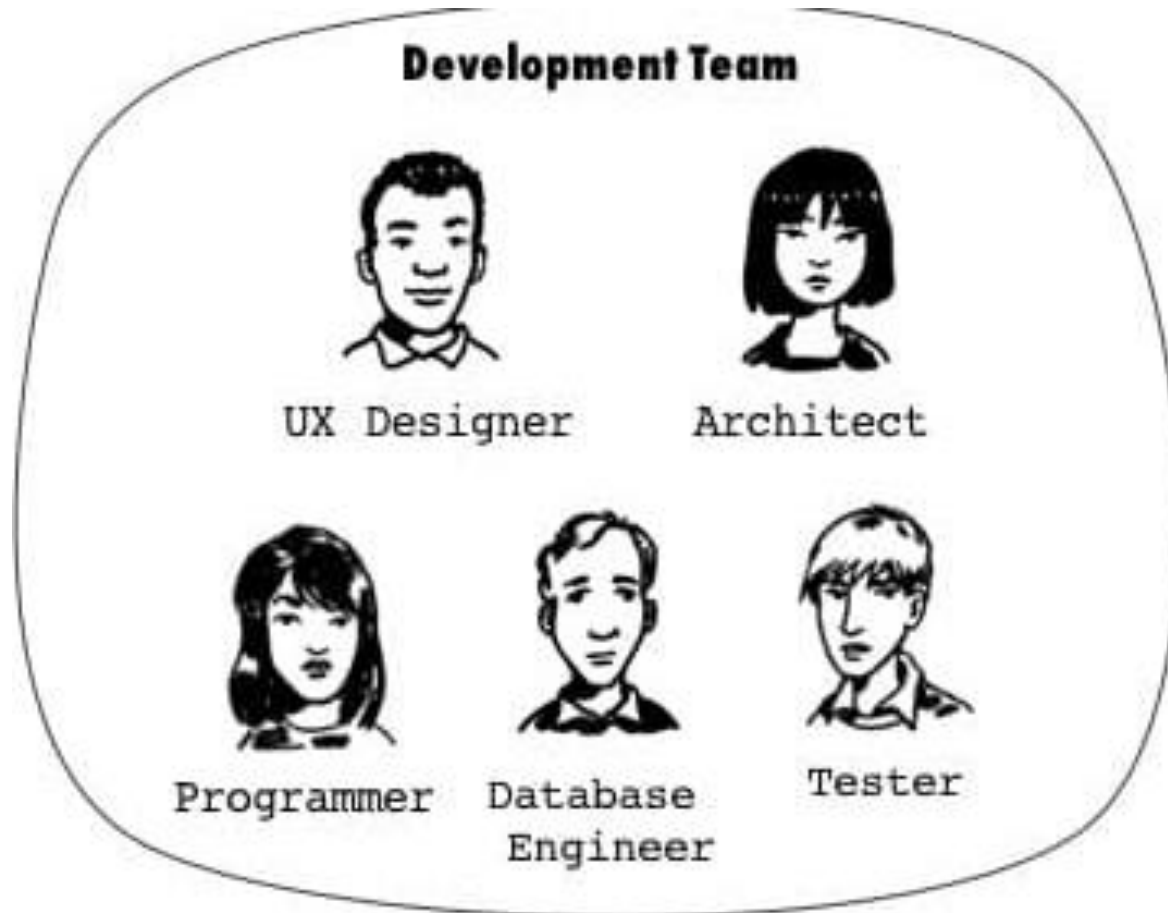
### Daily Tasks Performed by Scrum Master



- Change agent, Protects from external disturbances
- Servant Leader, Facilitates Scrum Events as needed
- Coaches Team in Self-Organization and Cross-functionality
- Removes impediments (when requested) and gets outside help for the Team when needed.
- Acts as a mirror and help Development Team to reflect and improve as a team
- Acts as Mentor and resolves conflicts when needed
- Coaching the Development Team in organizational environments in which Scrum is not yet fully adopted and understood.

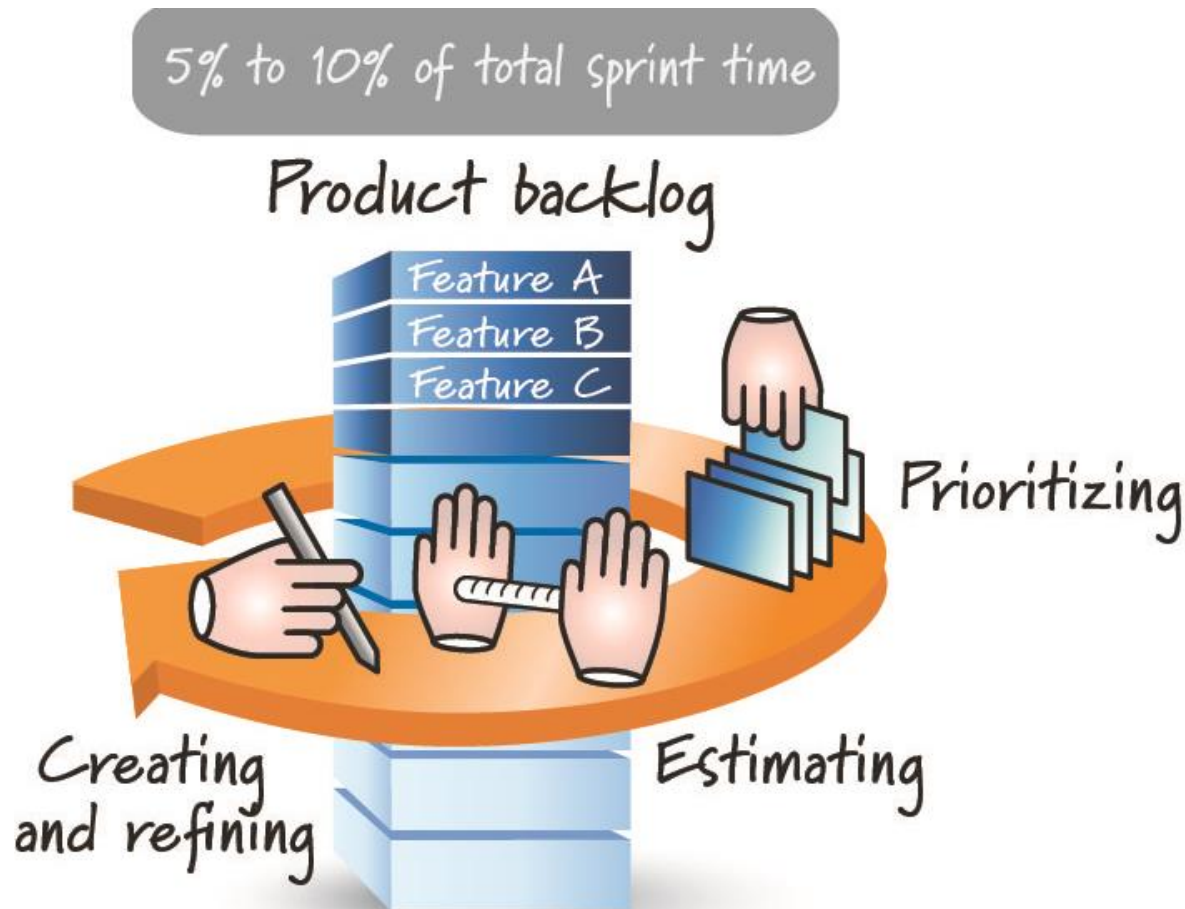
# Scrum Role: Development Team

## Responsibilities



- All professionals with the skills required to create the working product are part of Development Team.
- Primary responsibility of the Development Team is to deliver a potentially shippable product increment at the end of each Sprint.
- Self-Organizing -> empowered to manage, organize their own work to create potentially shippable product.  
Development team alone determine "how" to build to accomplish the Sprint Goal.
- Cross-functional -> Have all the skills necessary as a team to create a product increment.

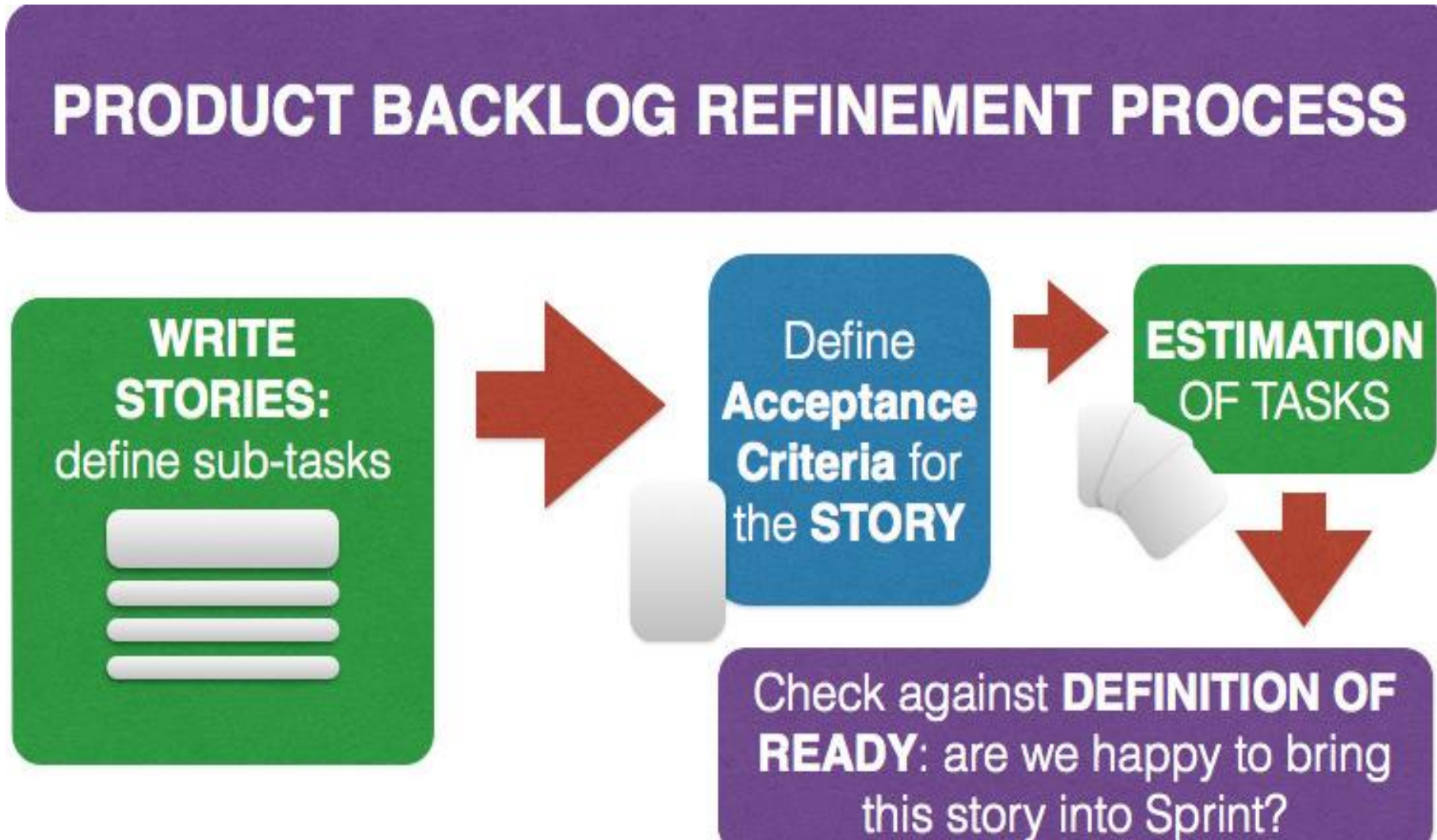
# Scrum Ceremony: Product Backlog Refinement



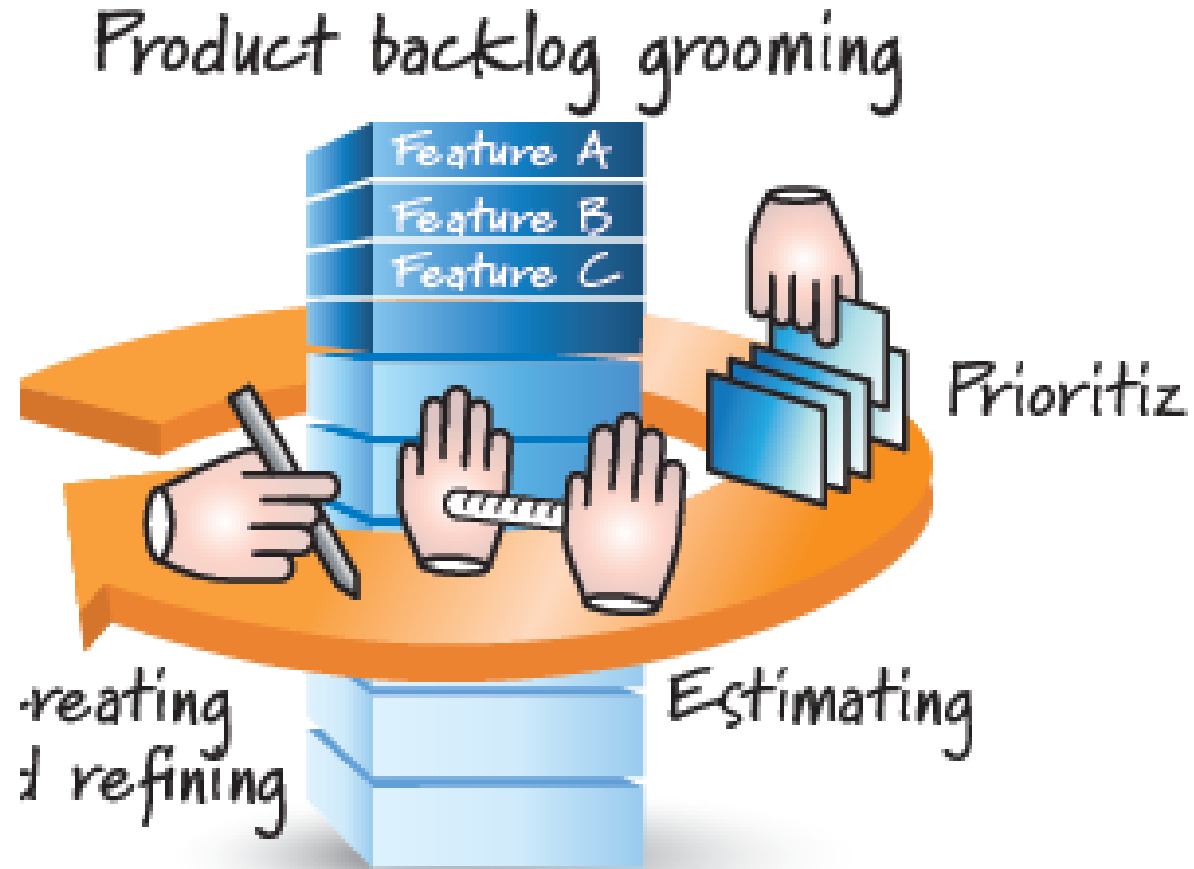
Product Backlog Refinement is an ongoing process in which the Product Owner and Development Team collaborate on the details of the Product Backlog items

Product Backlog Refinement may include

- Adding or removing items to the Product Backlog
- Ordering/Re-ordering items in the Product Backlog
- Estimating Product Backlog Items (PBI)
- Reviewing, Revisiting PBIs.
- Splitting PBIs into smaller PBIs
- Merging PBIs into larger PBIs



# Backlog Grooming





# User Story & Acceptance Criteria

## User Story

**As a** <role>  
**I want** <goal>  
**so that** <benefit>

**Acceptance criteria:**  
(Conditions of Satisfaction)

...

...

**As an** Account Manager  
**I want** a sales report of my account  
to be sent to my inbox daily  
**So that** I can monitor the sales  
progress of my customer portfolio

**Acceptance criteria:**

1. The report is sent daily to my inbox
2. The report contains the following sales details: ...
3. The report is in csv format.

### USER STORY TEMPLATE

ID: <>

Title: <>

Description:

As a <user>

I want to <take some action>

So that <I could accomplish my goal>

Acceptance Criteria:

Given <Actor is somewhere>

When <Actor does something>

Then <An event happens that marks the end-user interaction>

Given <>

When <>

Then <>

<b>Scenario</b>	The type of behavior that will be addressed
<b>Given</b>	The situation at the outset of the scenario
<b>When</b>	An action undertaken by the user
<b>Then</b>	The outcome of the user action
<b>And</b>	Any continuation of the previous statements

For example:

<b>Scenario</b>	A coach needs to generate reports on her athletes so she can evaluate their improvements over time
<b>Given</b>	An athlete's current assessment is <b>X</b> , and
<b>When</b>	Past assessment findings were <b>Y</b> ,
<b>Then</b>	Compare the two assessment findings and determine the performance increase/decrease
<b>And</b>	Generate a detailed report on the athlete's progress



# Definition of Ready & Definition of Done

## DoR & DoD

### DEFINITION OF READY

The business value and priority of the User Story is clear.

The User Story is clear for the TEAM: description and acceptance criteria.

The UX concept is ready (if needed).

Test data and test devices are ready (if needed)

All external dependencies are clear.

There are no major open questions left.

The User Story has been estimated.

User Story is small enough (smaller than one Sprint).



### DEFINITION OF DONE

All acceptance criteria met.

UX review is done.

All designs and texts are approved by Editorial, CL and Stakeholders (if needed).

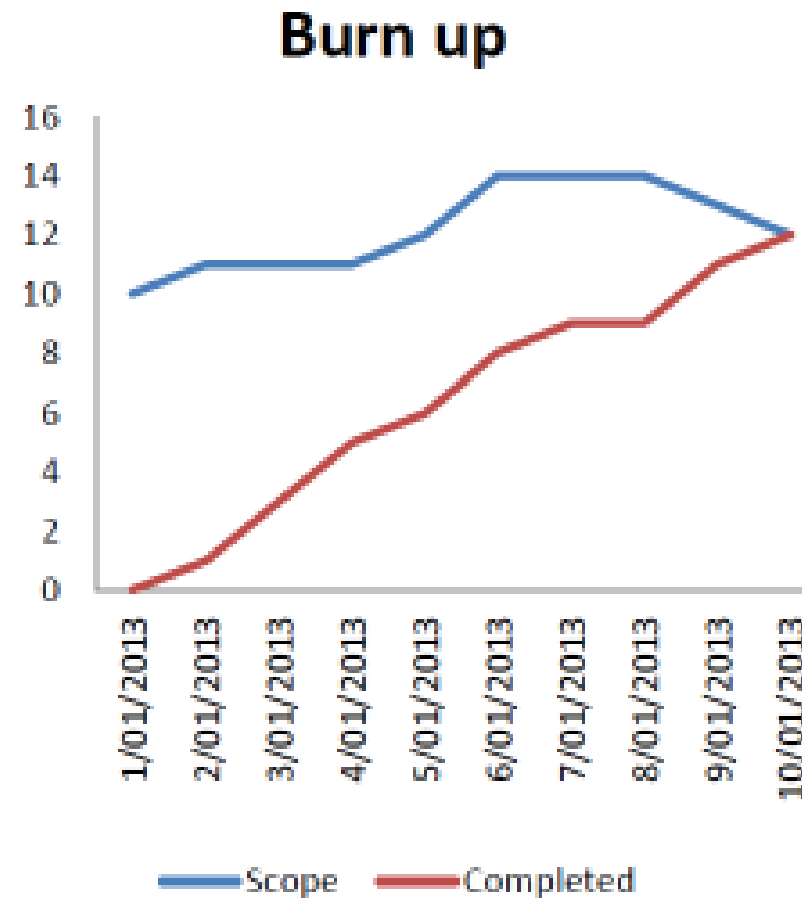
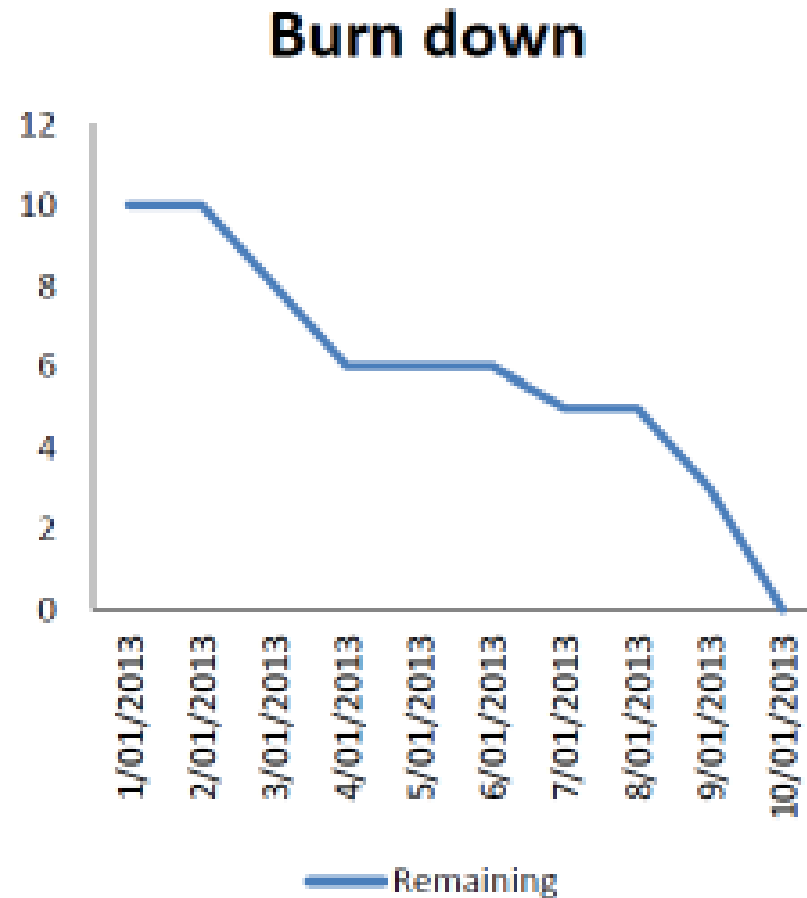
Probe scripts are up to date.

UAT is done done:  
- 100% critical/major test cases coverage;  
- No Prio 1 and Prio 2 defects open;  
- All workarounds are accepted by BA and Stakeholders

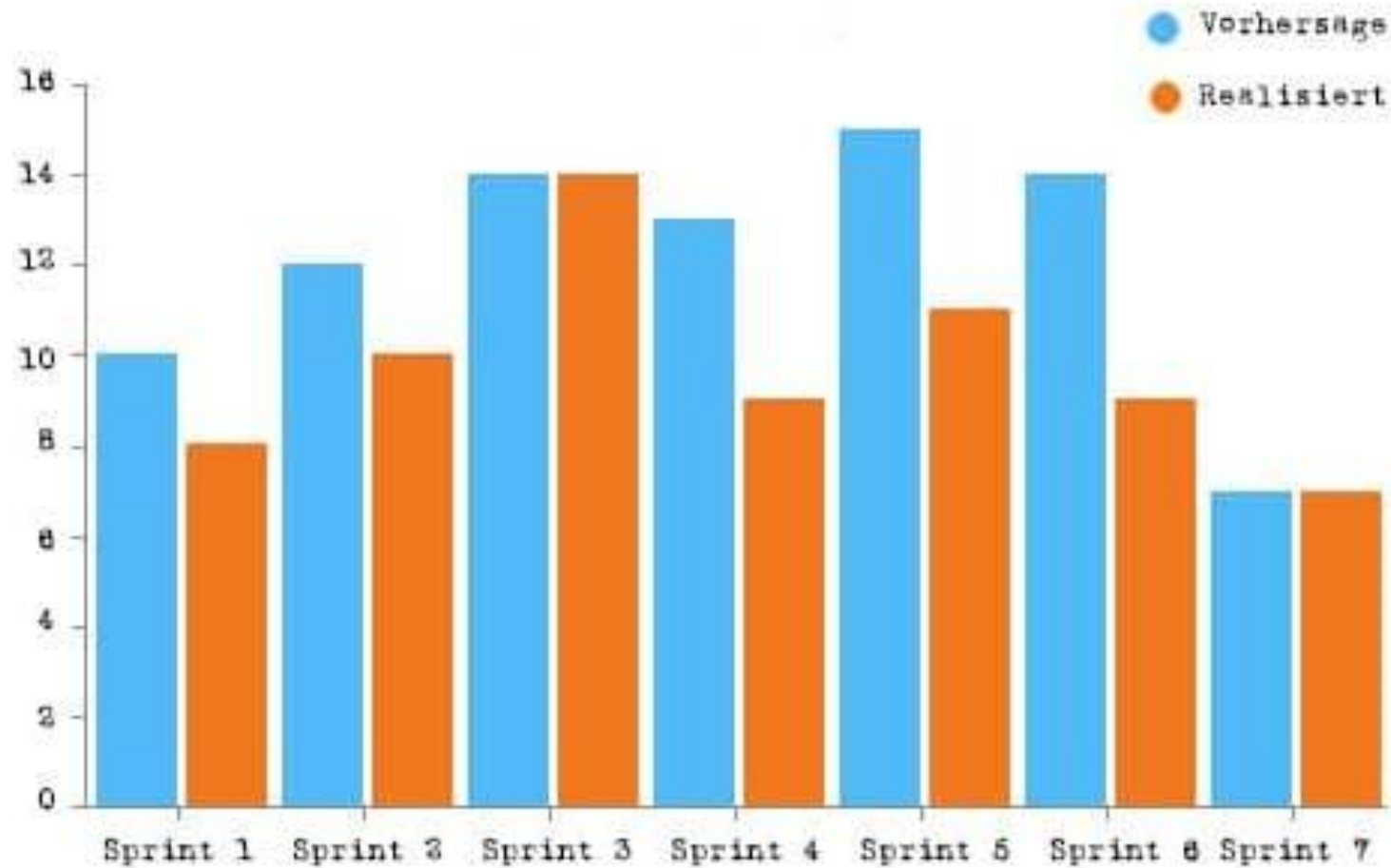
Documentation.



# Metrics: Burn Down Chart & Burn Up Chart



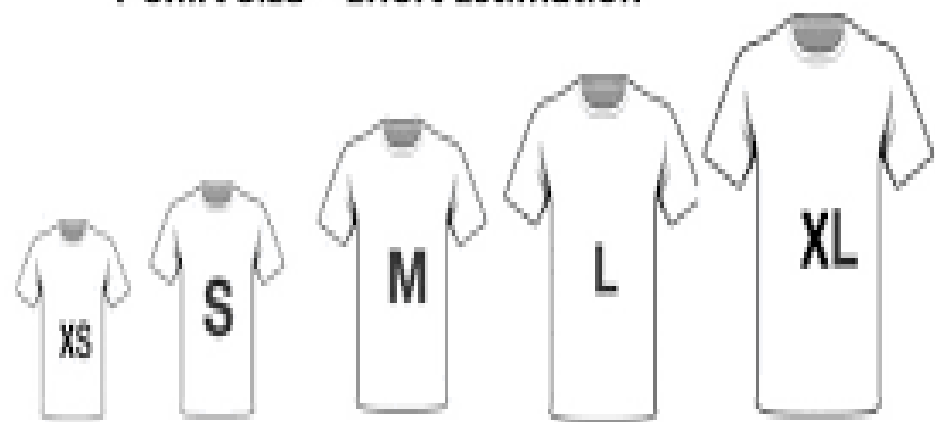
# Metrics: Velocity looks like



# Estimation

## T-shirt Size & Story Point Estimation

T-Shirt Size – Effort Estimation



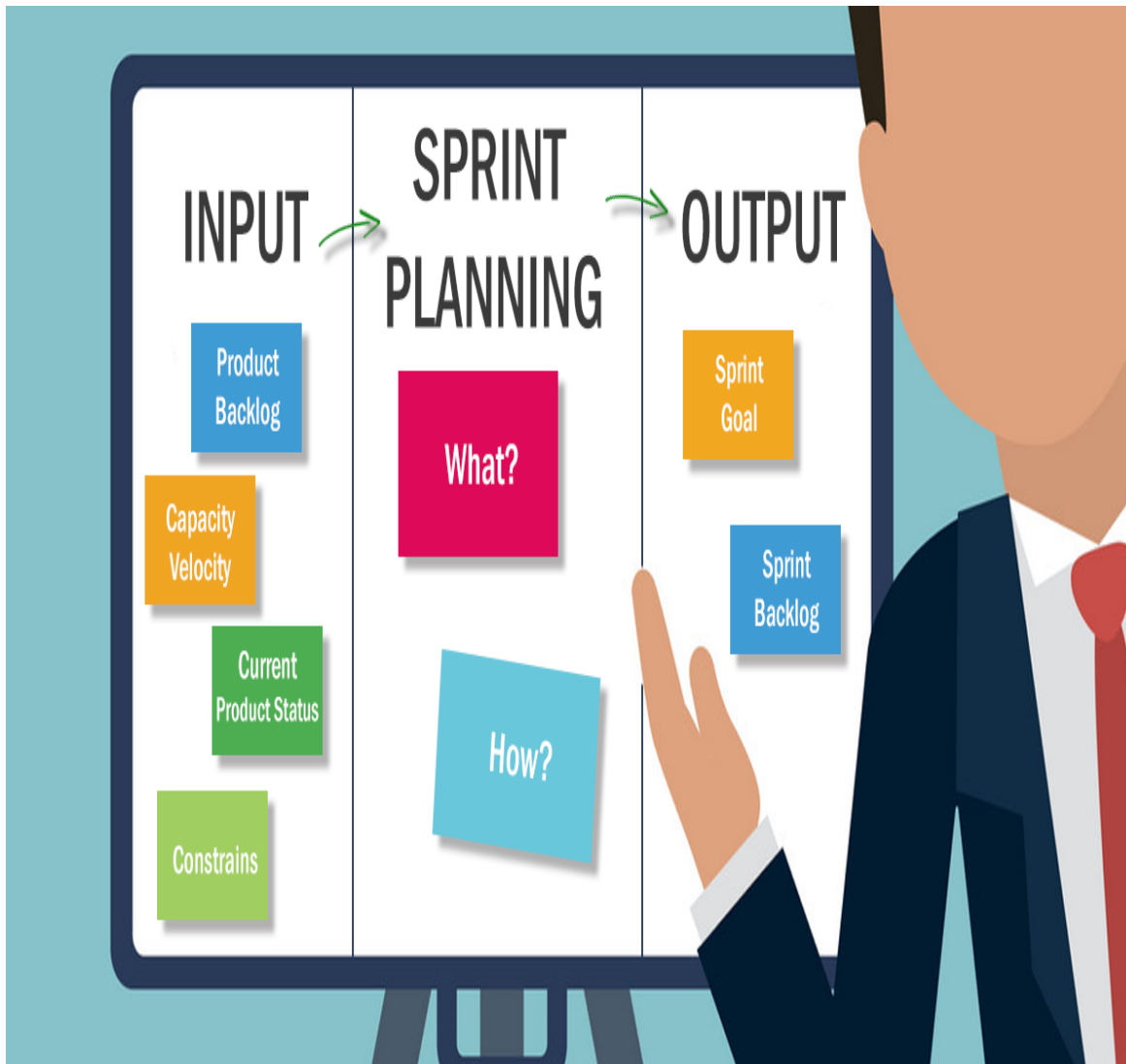
T-Shirt Size	XS	S	M	L	XL
Estimate	1	2	3	5	8

Source: PMTigrlays

How much is known about the task	Everything	Almost everything	Something	Almost nothing	Nothing	Nothing
Dependencies	None	Almost none	Some	Few	More than few	Unknown
How much work effort	Less than 2 hours	Half a day	Up to two days	Few days	Around a week	More than one week
Story Points	1	2	3	5	8 Should be split into smaller items	13 Must be split into smaller items

To get story points - pick the column which represents your task the best. If it fits more than one column, pick higher one.

# Scrum Ceremony: Sprint Planning



**Who:** Scrum team(SM, PO & Dev Team)

**When:** At the beginning of the Sprint

**Time-Box:** Maximum of 2 hours for a 2 weeks Sprint

**Input:** Product Backlog, latest product increment, Definition of Done, Team Capacity, Team past performance

**Outcome:** Sprint Backlog, Sprint Goal, Shared understanding of work that would be undertaken during the Sprint

# Scrum Ceremony: Daily Scrum

## Daily Scrum Meeting



Time box



Same place



Same time



Facilitated by  
Scrum Master



Full team  
presence



Focus on 3  
questions

### 3 Main Questions:

1. What did I do yesterday?
2. What will I do today?
3. What's in my way?

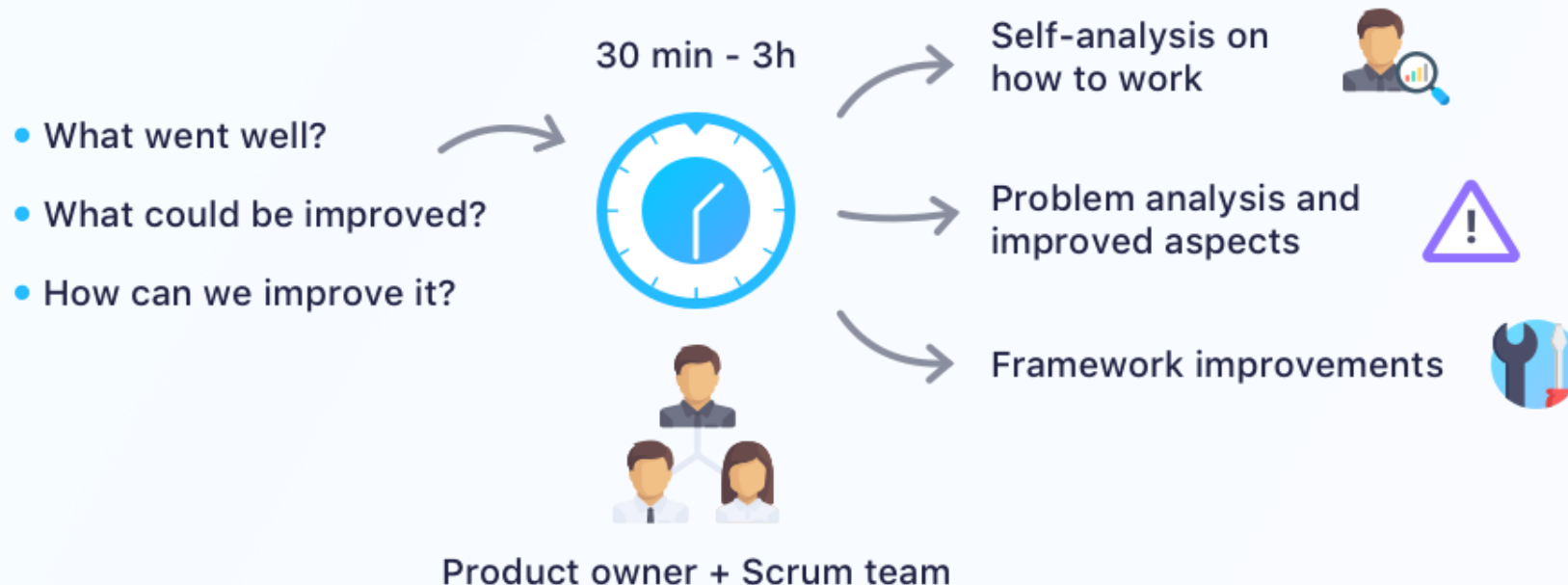
## Sprint Review

Meeting at the end of the sprint to check the increment



## Sprint Retrospective

Meeting after Sprint Review to review processes





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Thank you

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