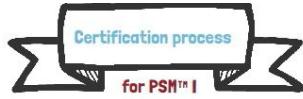


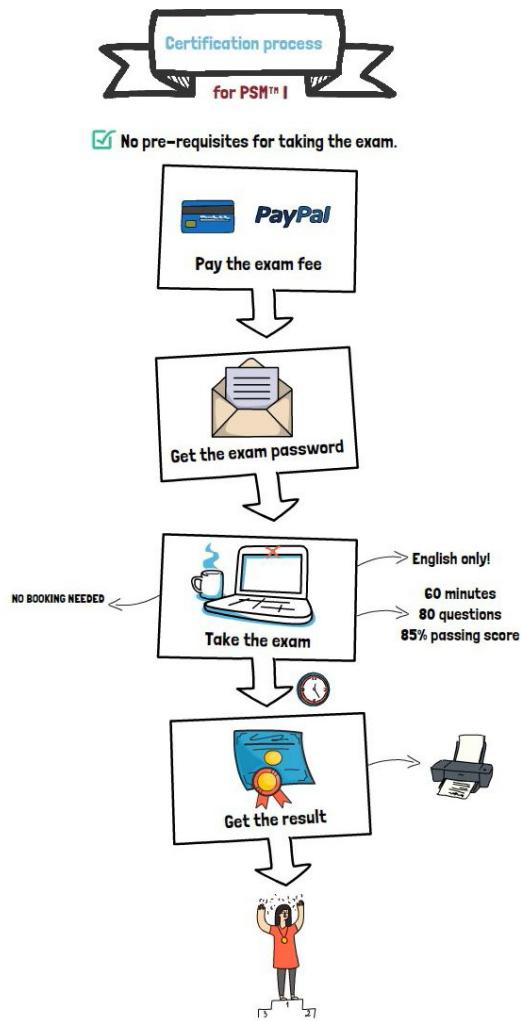
# PSM-I Udemy Recap

2022-03

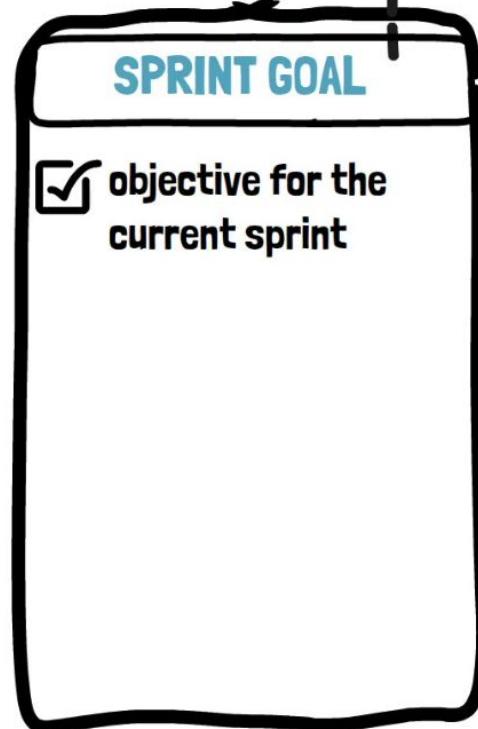
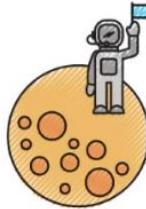


No pre-requisites for taking the exam.

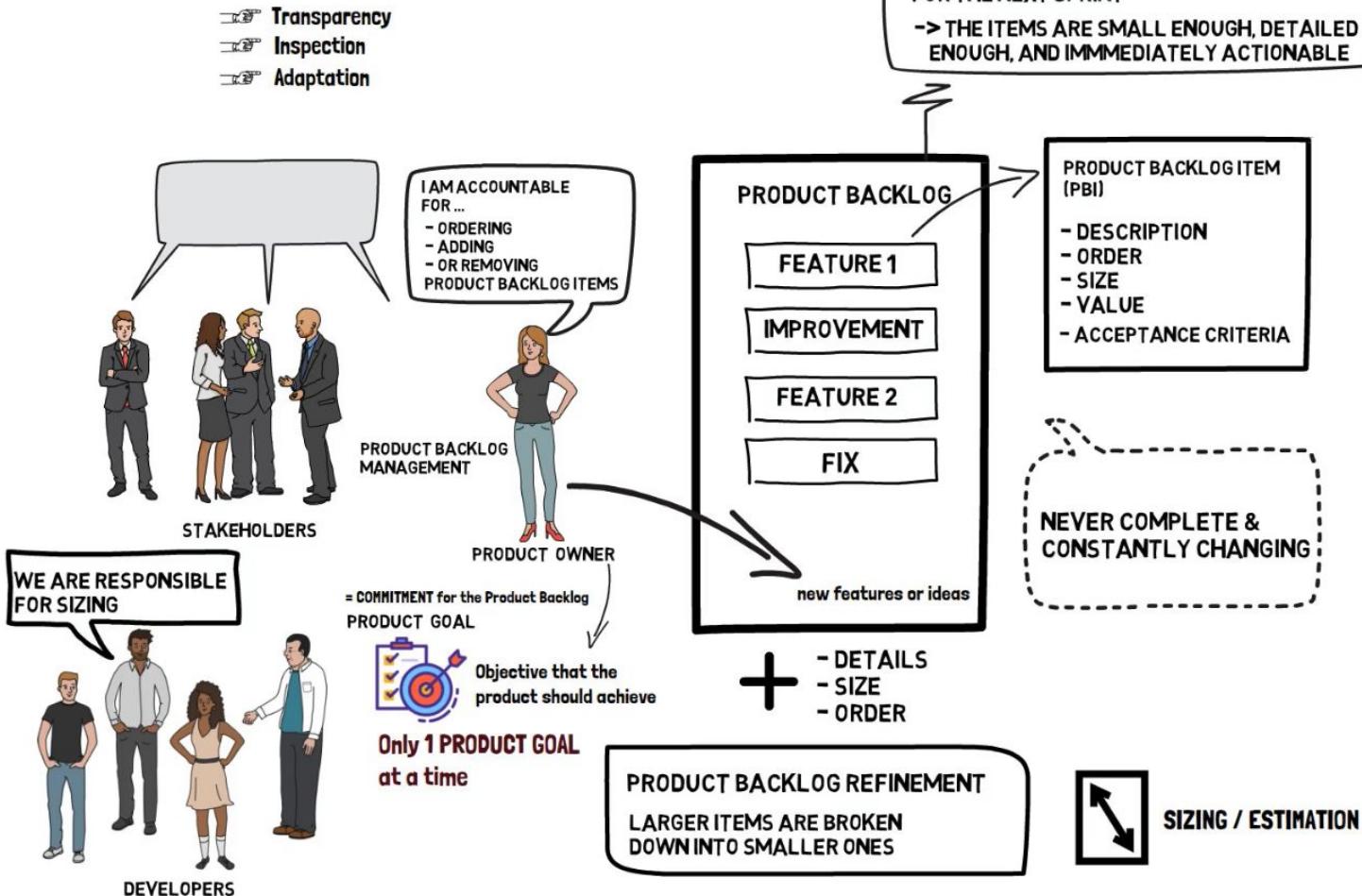
**2–3 weeks  
prep time**

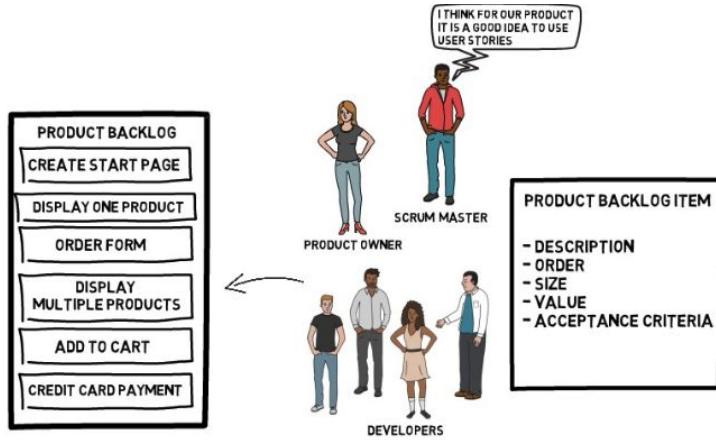


**Step by step guide**



# PRODUCT BACKLOG





## USER STORIES

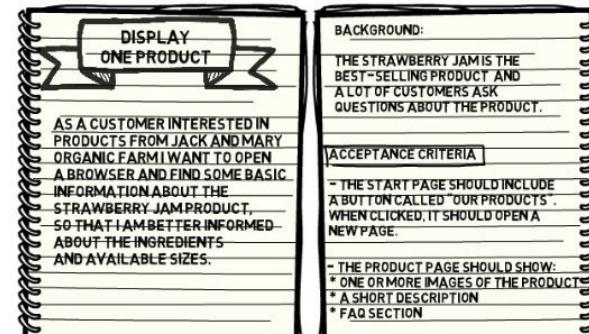
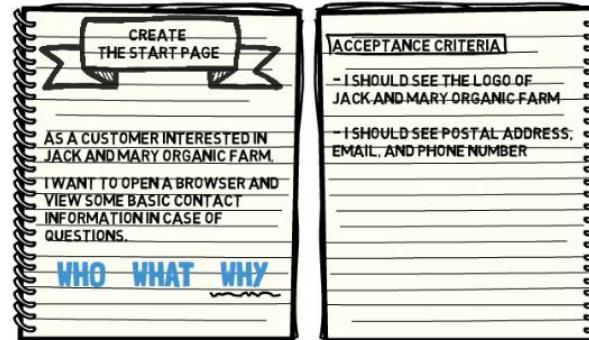
USER STORIES ARE SHORT DESCRIPTIONS OF A FEATURE EXPLAINED FROM THE PERSPECTIVE OF THE PERSON WHO DESIRES THE FUNCTIONALITY, USUALLY A USER OF THE PRODUCT.

- 3 C's**
- 3 STEP PROCESS:**
- Card
  - Conversation
  - Confirmation
- **ACCEPTANCE CRITERIA**

AS A < SOME USER >,  
I WANT < SOME OBJECTIVE >  
SO THAT < SOME OUTCOME >.

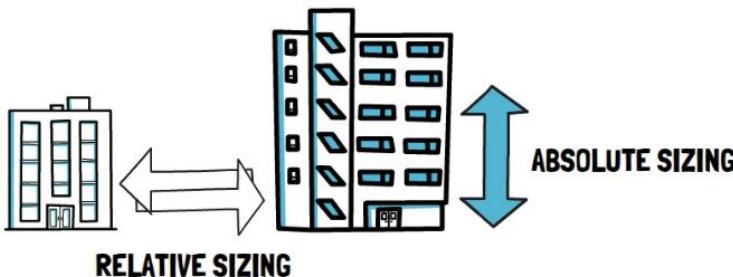
**Not every Product Backlog Item needs to be written as a User Story.**

**User Stories are not mandatory in SCRUM.**

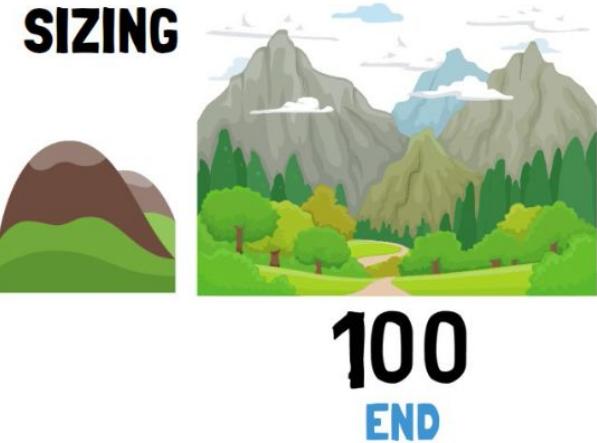


# ESTIMATE

IS A GUESS OF THE EFFORT NECESSARY TO CARRY OUT A GIVEN TASK



0  
START



# PLANNING POKER

0, 1, 2, 3, 5, 8, 13, 20, 40 AND 100.



8



13

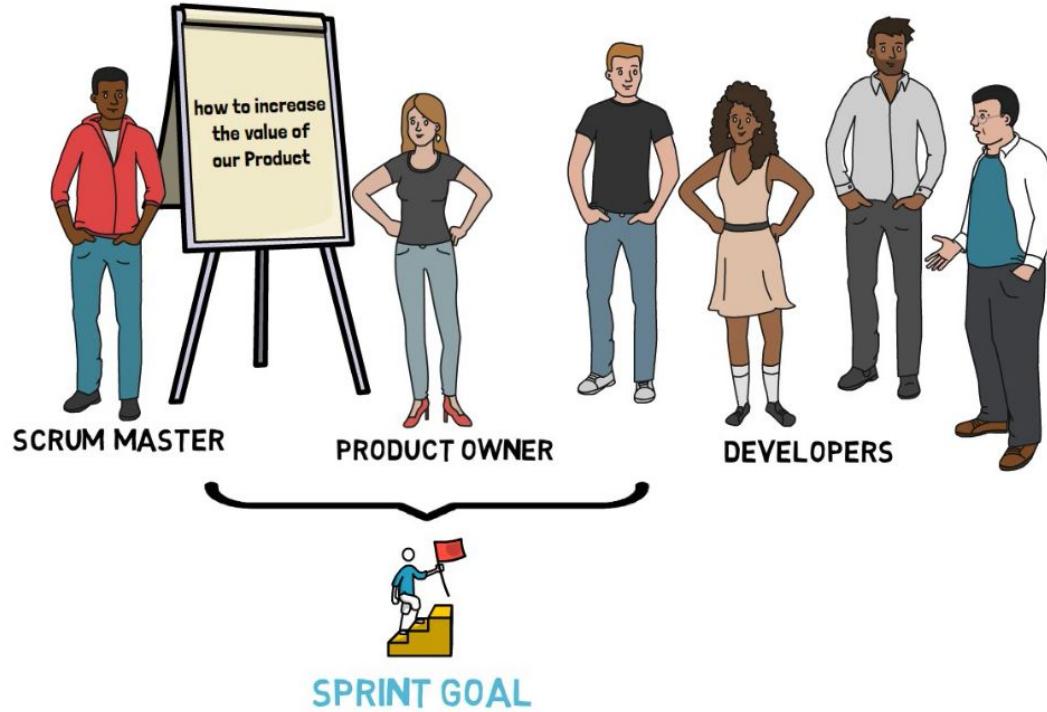


20



20

# SPRINT PLANNING MEETING



ordered list of ideas and features



PRODUCT OWNER

Product Backlog Item (PBI)

## PRODUCT BACKLOG

IMPROVMENT 5

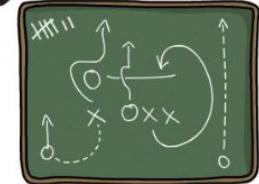
FIX

## SPRINT BACKLOG

FEATURE 4

CHANGE 3

+



DEVELOPERS

PBI for the current Sprint

"WHAT"

## FORECAST

Sprint Goal

"WHY"

Plan

"HOW"



TRANSPARENCY

TEMPORARY ARTIFACT

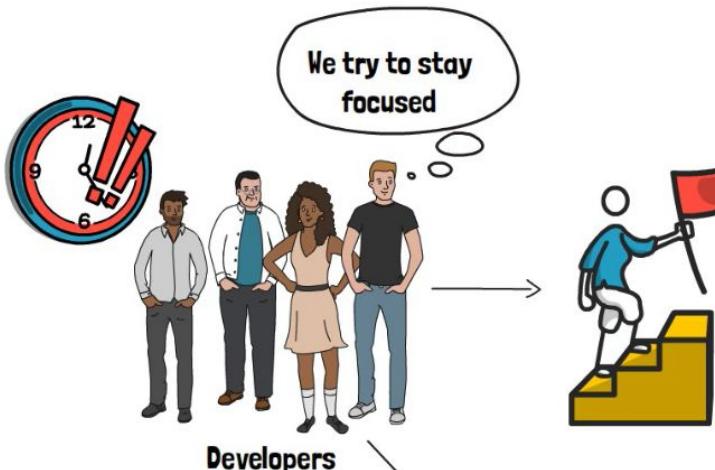


\* unfinished work in the Sprint Backlog at the end of a Sprint, will be put back into the Product Backlog

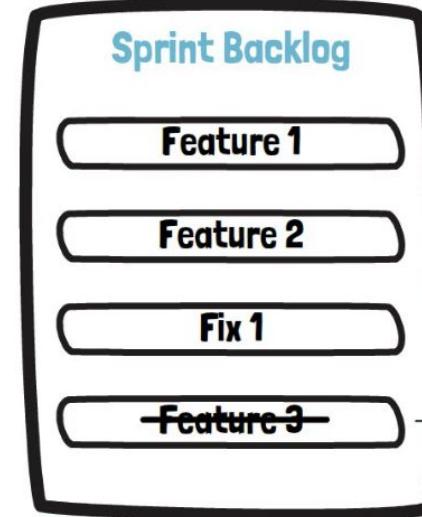


The total work remaining in the Sprint Backlog will be tracked at least once a day with every Daily Scrum.

- will modify the Sprint Backlog throughout the Sprint for reaching the Sprint Goal
- will add new work to the Sprint Backlog



## Scope Renegotiation

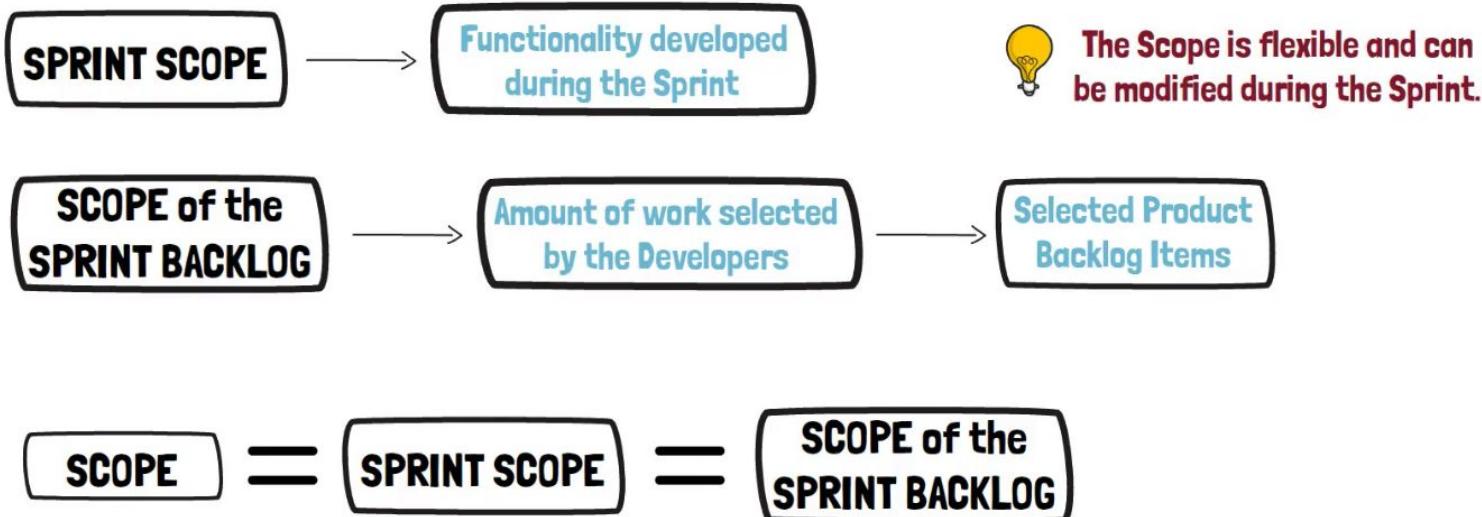


Relevant for the Sprint Goal

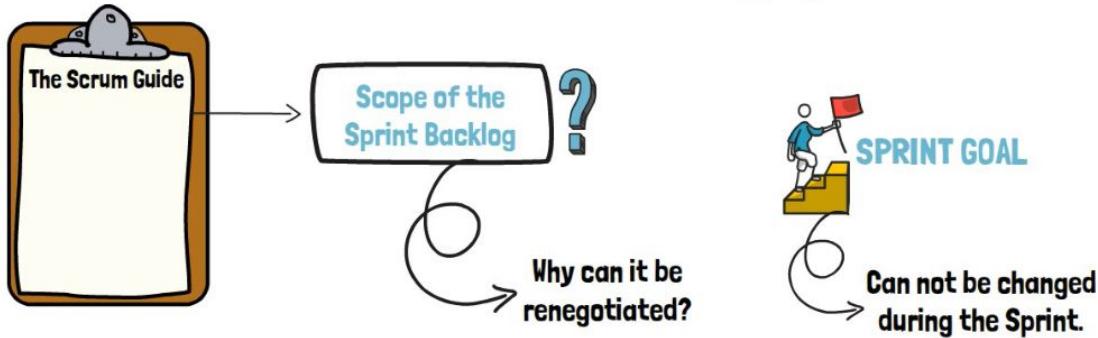
Not relevant for the Sprint Goal

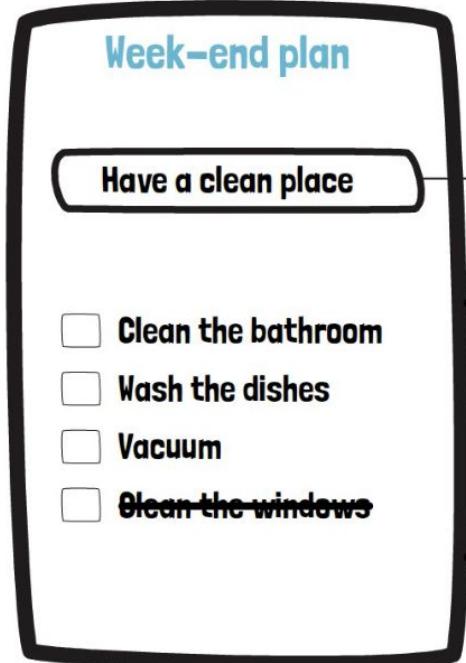
Try to meet the Sprint Goal  
while making some **COMPROMISES**,  
usually in terms of features,  
**NEVER ON QUALITY.**

# SCRUM



## Sprint Scope vs. Sprint Goal





Keeps you focused

Remains the same



**SCOPE** = What you want to do + The extent of the work

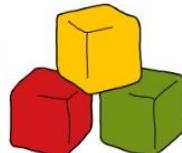
Can change



## PRODUCT INCREMENT

= a new version of the Product

→ it's additive to all previous  
Increments from all previous  
Sprints



Every Product Increment needs to be usable  
without needing any additional work.



at least one new  
Product Increment



**PRODUCT INCREMENT**



Quality

WHAT DOES  
"DONE" MEAN?

**DEFINITION OF DONE**

Quality standards of the organization  
need to be followed at a minimum.

Jack & Mary's minimum requirements:



100% organic





Each Sprint will create at least one Product Increment that needs to adhere to the Definition of Done.

If a Product Backlog Item in the Sprint does not follow the Definition of Done, it will not be included in the Product Increment.

MORE EXPERIENCE  
OF THE SCRUM TEAM

DEFINITION OF DONE

MORE STRICT CRITERIA  
FOR HIGHER QUALITY

SPRINT RETROSPECTIVE



DEFINITION OF DONE

= commitment for the Increment

TRANSPARENCY FOR  
THE PRODUCT INCREMENT



DEVELOPERS

how many Product Backlog Items  
to choose during the Sprint  
Planning meeting

DEFINITION OF DONE

INCREASE PRODUCT  
QUALITY



## When is the Definition of Done created?

We can also have other meetings.

We can define the first version of the Definition of Done before the first Sprint.

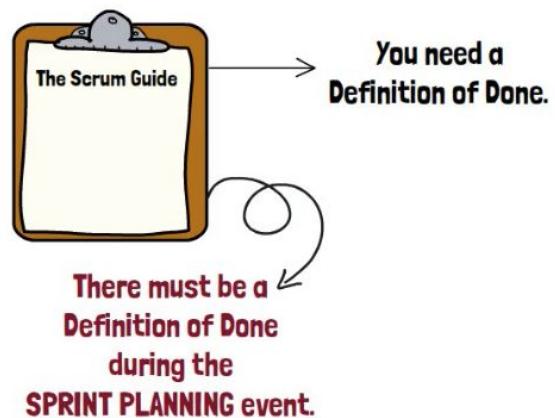


The best opportunity to adapt the Definition of Done is during the **SPRINT RETROSPECTIVE** meeting.

Not everything has to happen in one of the Scrum events.



The Scrum Guide does NOT mention when to create the Definition of Done.



## DEFINITION OF DONE vs. ACCEPTANCE CRITERIA

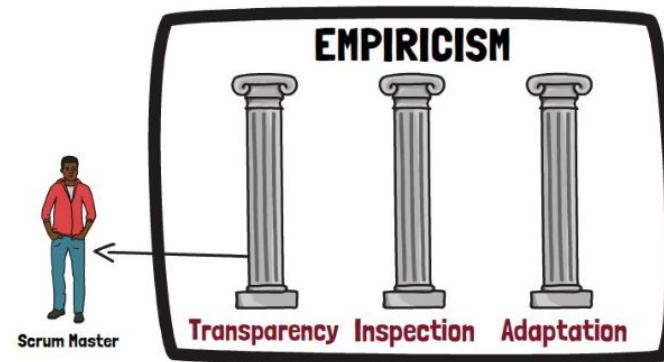
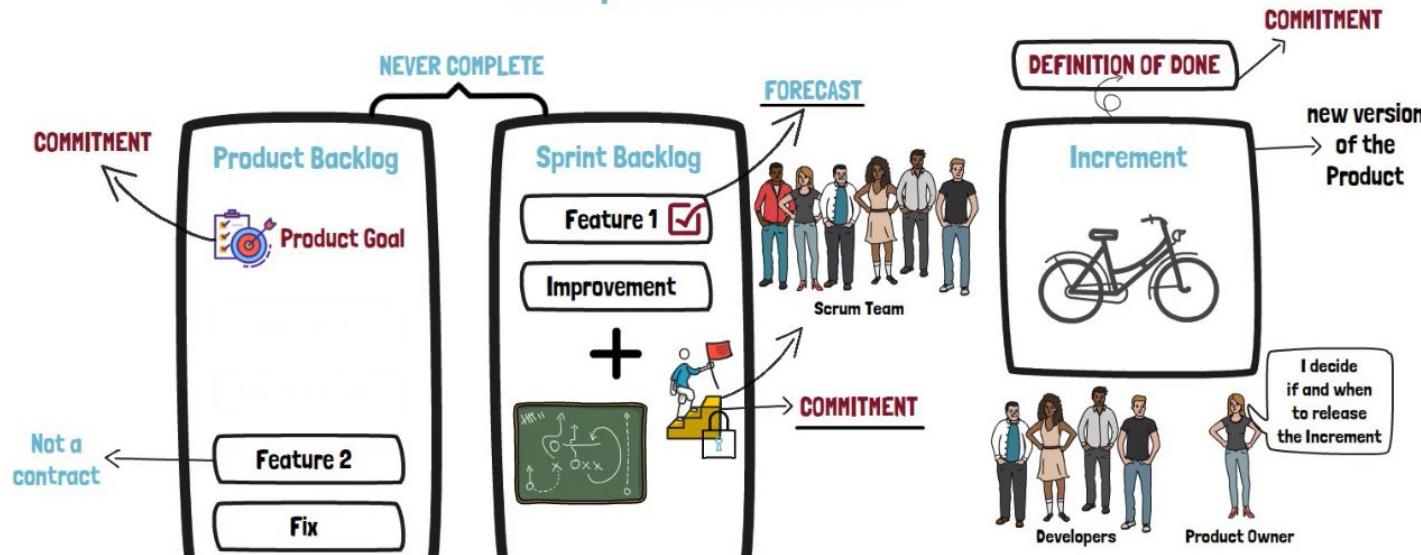
Definition of Done	Acceptance criteria
<ul style="list-style-type: none"><li>- Applies to every PBI &amp; the Increment.</li><li>- Created by the Scrum Team.</li><li>- Commitment for the Increment.</li><li>- Mandatory in Scrum.</li></ul>	<ul style="list-style-type: none"><li>- Applies to a single PBI.</li><li>- Created by the Product Owner.</li><li>- Part of a PBI.</li><li>- Optional in Scrum.</li></ul>



For releasing one PBI to the users, it needs to meet the **ACCEPTANCE CRITERIA**, if they were defined, **AND** the **DEFINITION OF DONE**.

The **INCREMENT** created for one or more PBIs also needs to meet the **DEFINITION OF DONE**

# Recap Scrum Artifacts



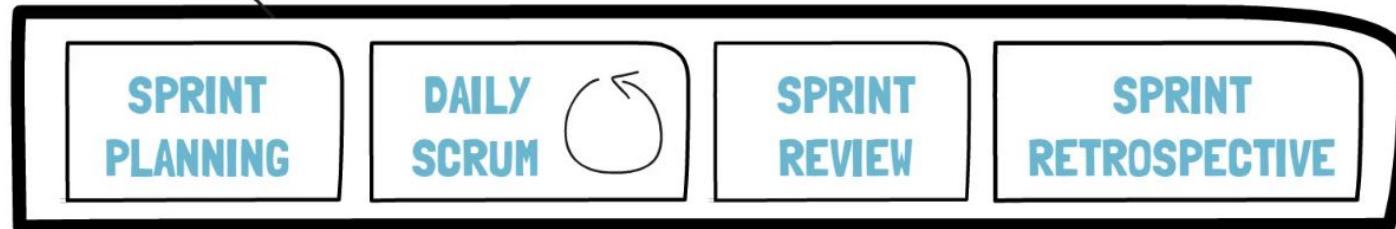
# SCRUM EVENTS

→ MANDATORY

→ best held at the  
same time & place

## SPRINT

Container for  
all events



ALL EVENTS ARE TIME-BOXED



TRANSPARANCY & INSPECTION



The Scrum Team CAN have other meetings.

The Product Backlog refinement  
meeting is NOT a Scrum Event.

## What is a TIME-BOX?

MAXIMUM DURATION  
of an event



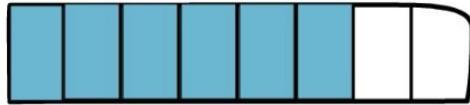
### Sprint Planning meeting



8 hours for  
one-month Sprint



1 hour instead  
of half a day



Time-Boxes force you to focus  
on the main important thing.

Time-Boxes are useful for  
making any issues visible.



Time-Boxes apply to ALL scrum Events,  
APART from the SPRINT itself

# The Sprint

- \* PRODUCT BACKLOG  
REFINEMENT ACTIVITY
- \* ANY OTHER RELEVANT  
MEETINGS

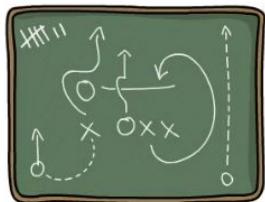
ONE MONTH  
OR LESS

SPRINT  
PLANNING

DAILY  
SCRUM

SPRINT  
REVIEW

SPRINT  
RETROSPECTIVE



DEVELOPMENT WORK



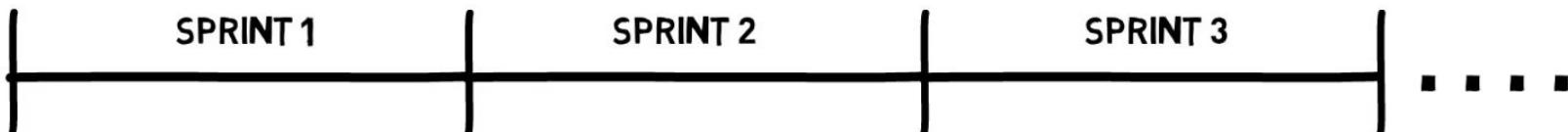
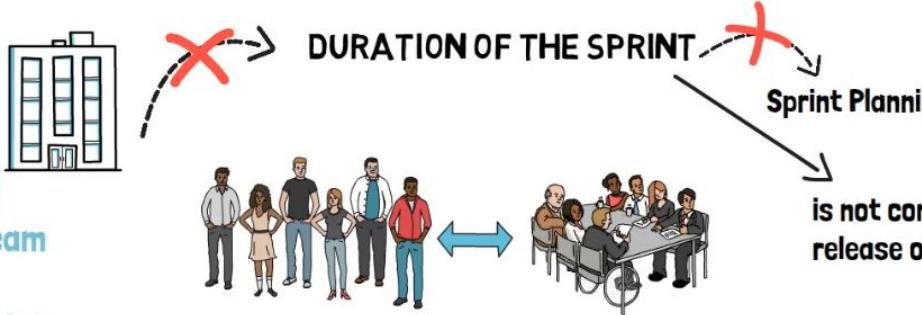
No changes should endanger the Sprint Goal.  
The quality standards should not decrease.



PRODUCT  
INCREMENT

The scope of the Sprint  
may be clarified and  
re-negotiated.

Based on empirical data, the Scrum Team can change the duration of the Sprint.



For software products Sprints tend to be two or three weeks long.

# SPRINT PLANNING

8 HOURS  
ONE MONTH SPRINT

8 HOURS  
SHORTER SPRINT  
but the meeting should take LESS

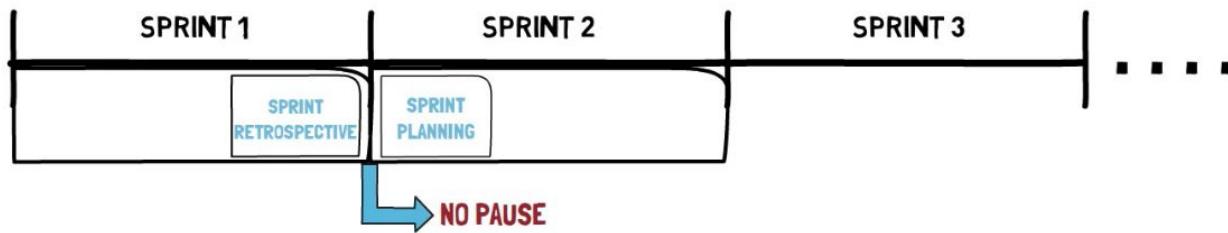
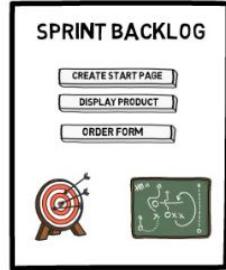


FIRST EVENT OF THE SPRINT  
BEST HELD AT THE SAME TIME AND PLACE

WHY is the Sprint valuable?

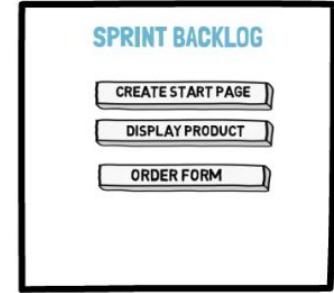
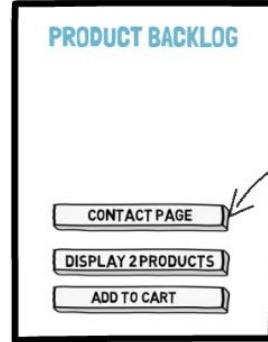
WHAT can be Done this Sprint?

HOW will the chosen work get done?



Sprint Review, Sprint Retrospective, and Sprint Planning do NOT need to happen on the same day!

Starting a new Sprint is NEVER DELAYED for any reason!



#### Examples:

- Customers can order a single product. **flexibility**
- Improve the average order size by 5% by suggesting customers other products on checkout. **specific**
- Decrease the number of customer complaints by 10% by allowing them to select a delivery date when placing the order. **measurable**



The Scrum Team can try out different approaches during the Sprint, release the Product to customers, and measure the results.

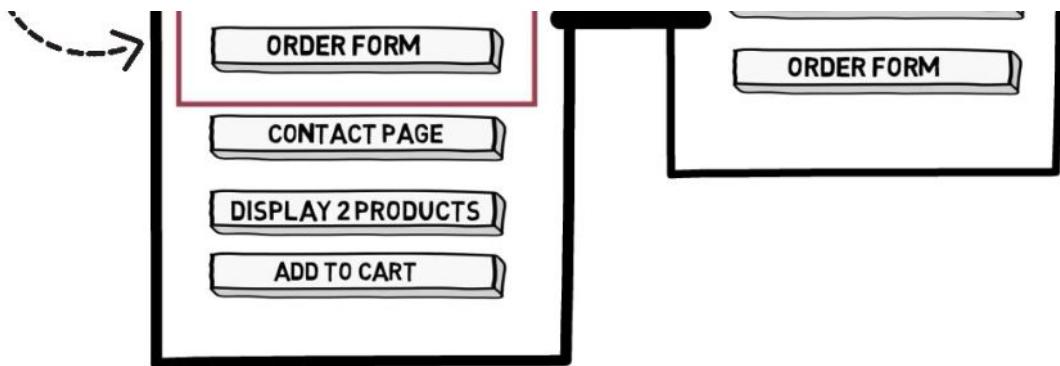




**The Increment can be released  
ANYTIME during the Sprint.**



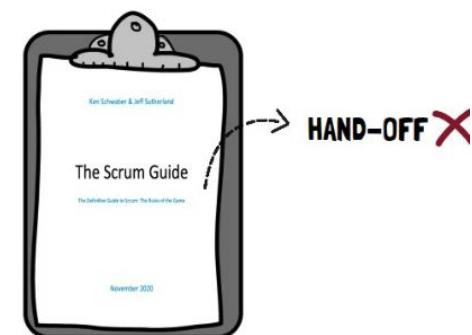
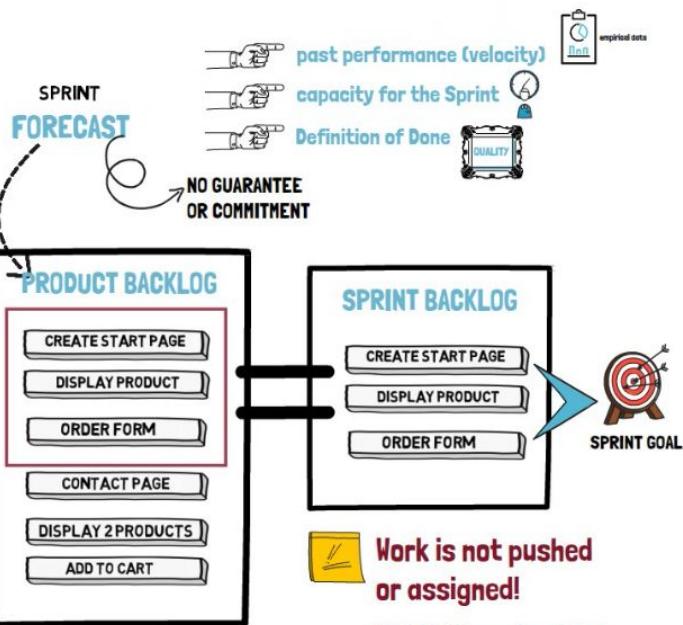
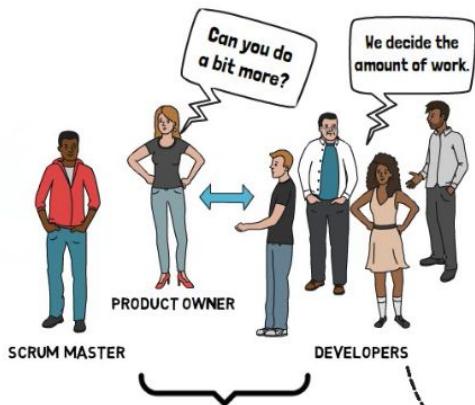
## PRODUCT BACKLOG REFINEMENT



backlog refinement can happen any time during the sprint, but also  
during the sprint planning meeting.

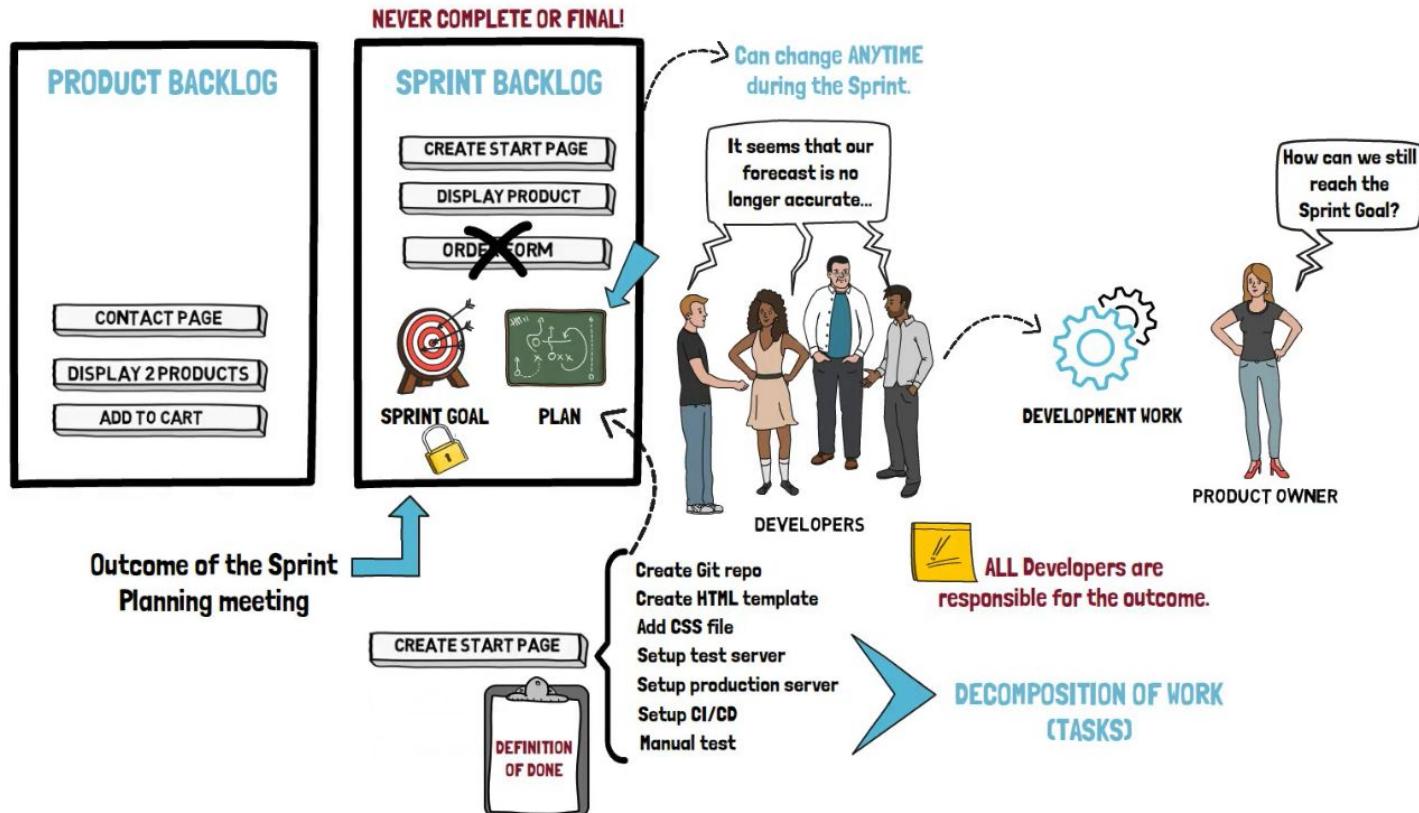
## DEFINITION OF DONE ←

# WHAT can be Done this Sprint?



**PRODUCT BACKLOG REFINEMENT**

# HOW will the chosen work get done?



# SPRINT PLANNING

WHO attends?



Nobody outside of the Scrum Team  
attends this meeting  
**UNLESS INVITED.**

ENTIRE Scrum Team



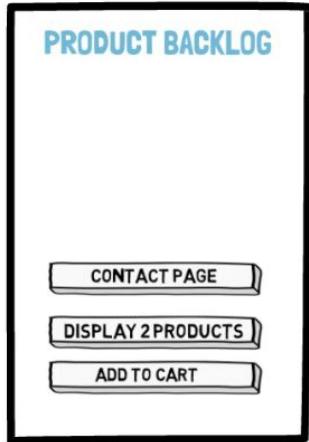
**ADVICE** ≠ How to do  
the work



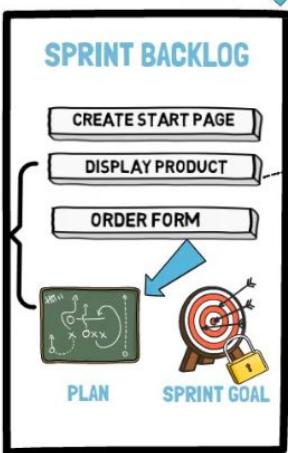
Transparency over the  
Scrum Artifacts



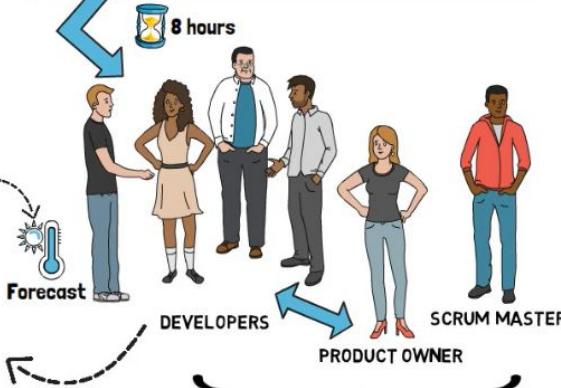
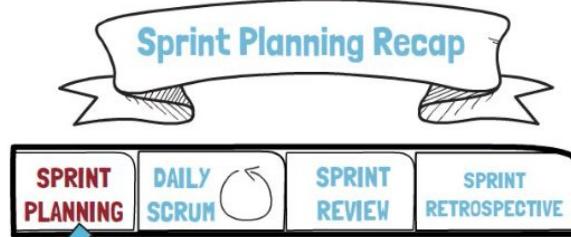
TIME-BOX



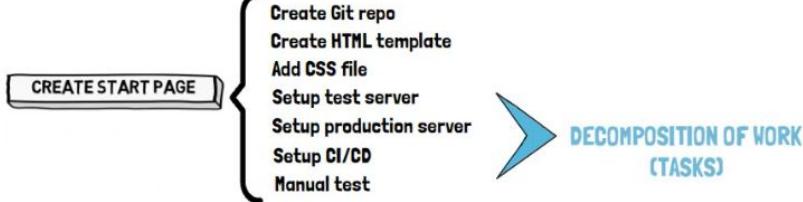
Can change  
ANYTIME  
during the  
Sprint.

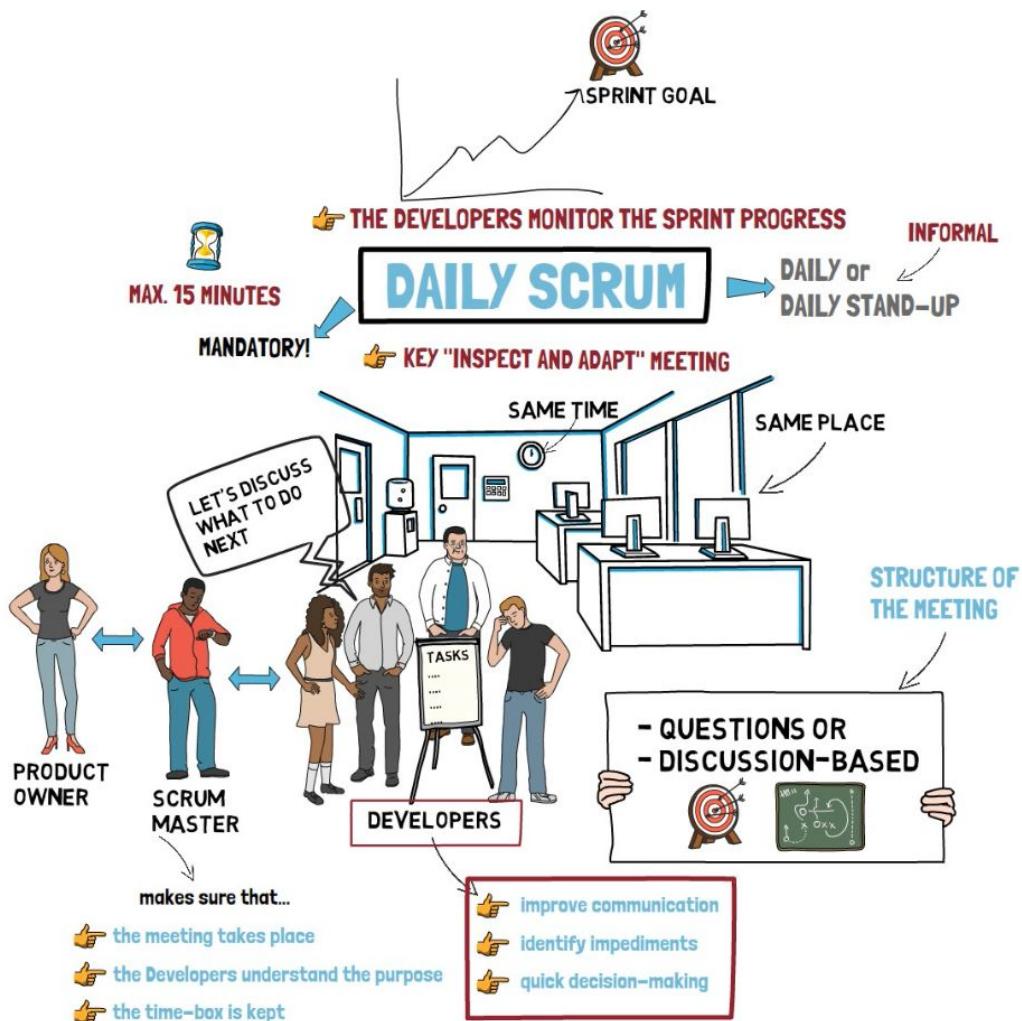


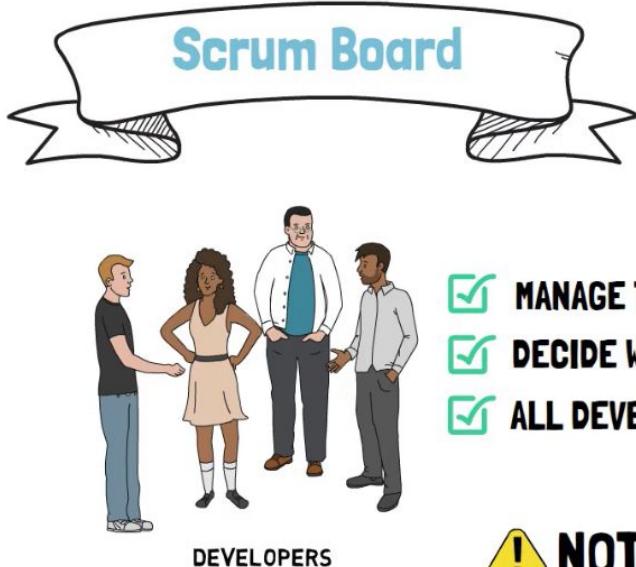
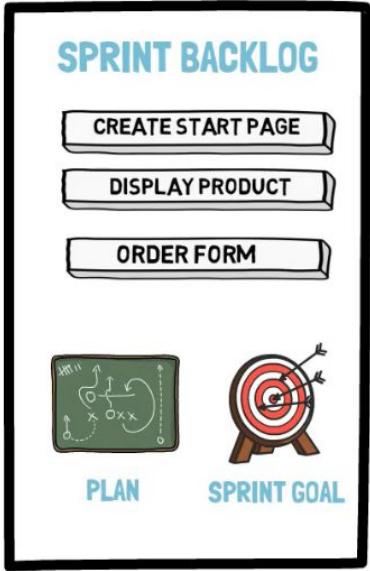
Outcome of the Sprint  
Planning meeting



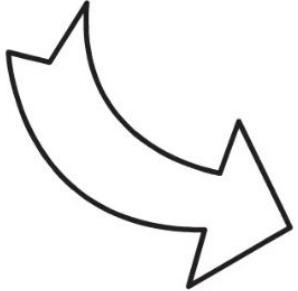
The ENTIRE Scrum Team  
is responsible for  
the outcome.



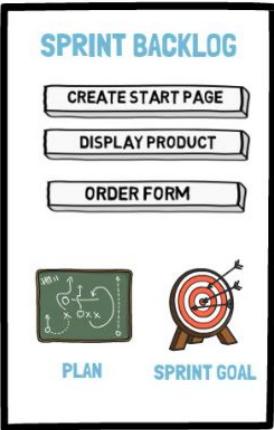
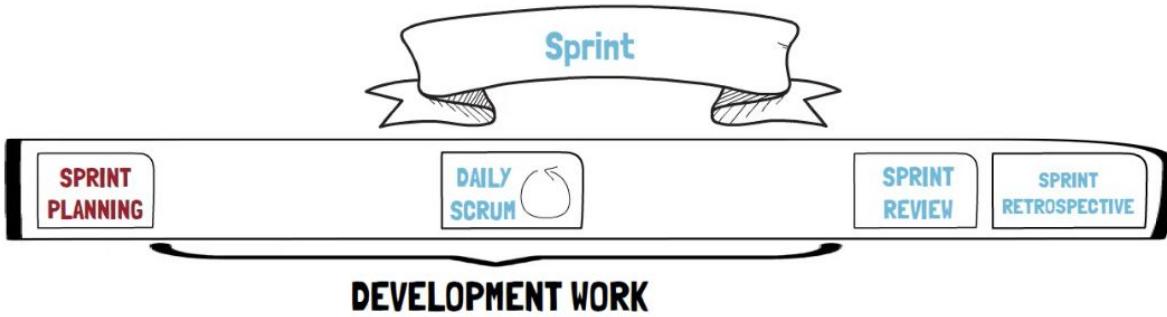




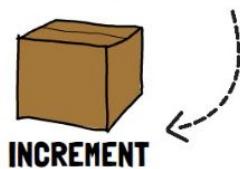
**! NOT MANDATORY IN SCRUM!**



TO DO	DOING	DONE
- TASK 1		
- TASK 2		
- TASK 3		
- TASK 4		
...		



- PRODUCT BACKLOG REFINEMENT
- ATTEND OTHER MEETINGS
- DECIDE IF AND WHEN TO RELEASE THE INCREMENT



## SPRINT OUTCOME

- 👉 Product Increment
- 👉 Sprint Goal
- 👉 Other results



NOT A RELEASE GATE

## SPRINT REVIEW

👉 "INSPECT AND ADAPT" MEETING

MAX. 4 HOURS  
FOR 1 MONTH SPRINT



## COMPLETED WORK

ONLY the LAST  
INCREMENT is  
inspected.



## SCRUM MASTER

makes sure that...

- 👉 the meeting takes place
- 👉 everyone understands the purpose
- 👉 the time-box is kept

## PRODUCT OWNER

## MANDATORY MEETING



## STAKEHOLDERS



## FEEDBACK

KEY  
STAKEHOLDERS

This is a  
mandatory event!

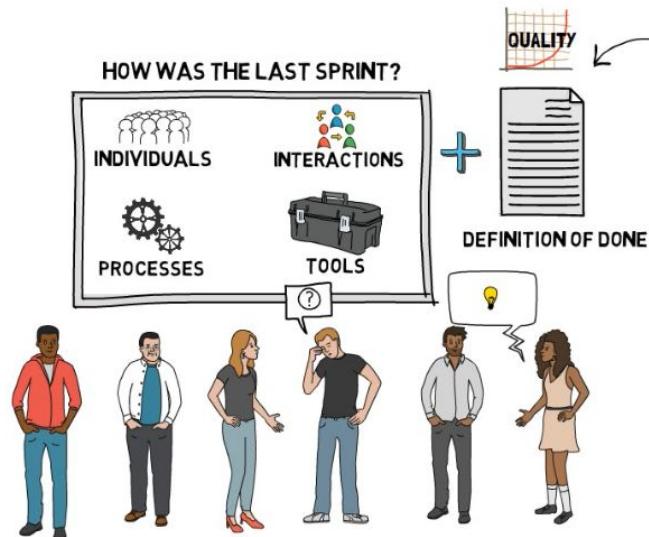
## Sprint Retrospective

"Retro"

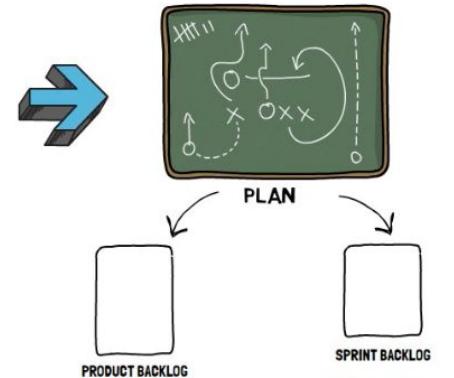
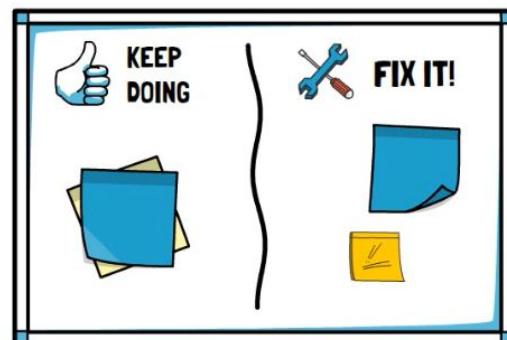
MAX. 3 HOURS FOR  
1 MONTH SPRINT



This event is dedicated to finding ways to improve.



This is the best time to make changes  
to the Definition of Done!

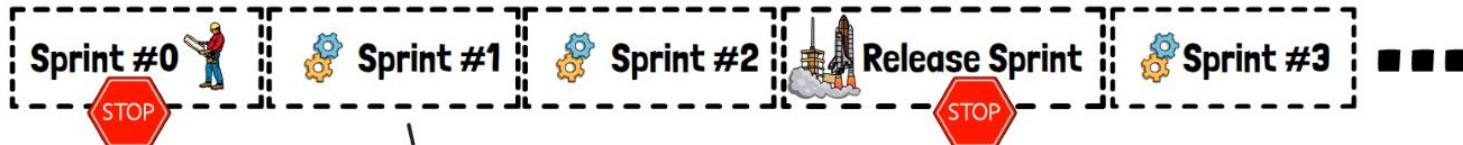


NOT mandatory,  
but HIGHLY RECOMMENDED!

the entire SCRUM TEAM must attend!

## Special Sprints

A plan is NOT an Increment!



An Increment is  
a bit of everything  
that is required ...  
no matter how small!

- HAVE A SPRINT GOAL
- REACH THE SPRINT GOAL
- PRODUCE AN INCREMENT
- CREATE A USEFUL FEATURE
- FEEDBACK LOOP

NO "SPECIAL SPRINTS"



This is a **VERY RARE** occurrence!

# Canceling the Sprint



If the Sprint Goal is **OBsolete**.



SUDDEN AND UNEXPECTED CHANGES!



As long as the Sprint Goal remains **VALID**,  
the Scrum Team should try and reach it.



STAKEHOLDERS



PRODUCT OWNER



SCRUM MASTER



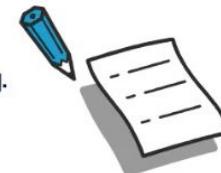
DEVELOPERS



**Sprint  
canceled**



- Sprint Review takes place, "done" work is reviewed.
- Incomplete PBIs are put back into the Product Backlog.
- Sprint Retrospective takes place.
- A new Sprint begins.





FLEXIBILITY



CREATIVE  
PROBLEM SOLVING



PRODUCTIVITY



BUILD THE PRODUCT

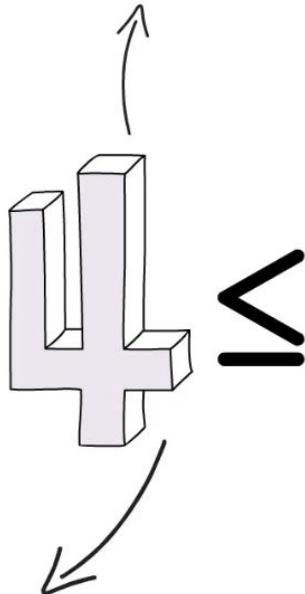


VALUE

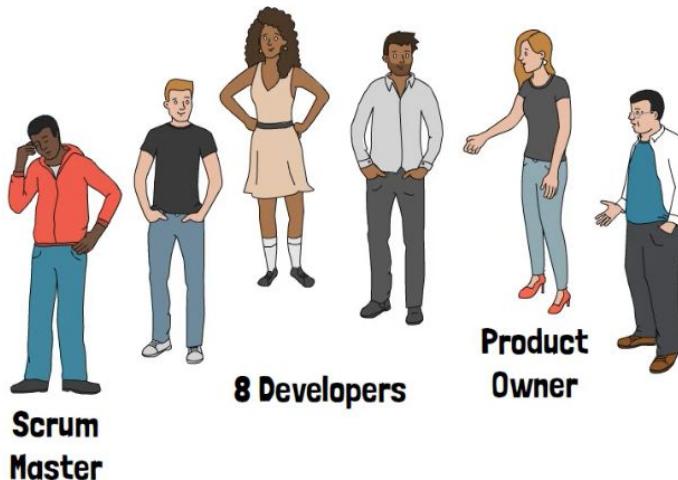


PRODUCT GOAL

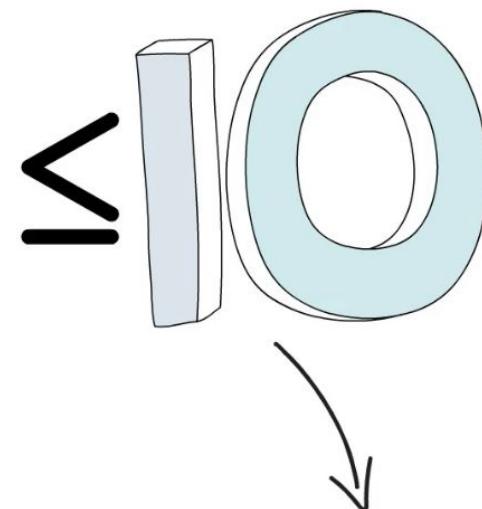
SKILL CONSTRAINTS



## SCRUM TEAM SIZE



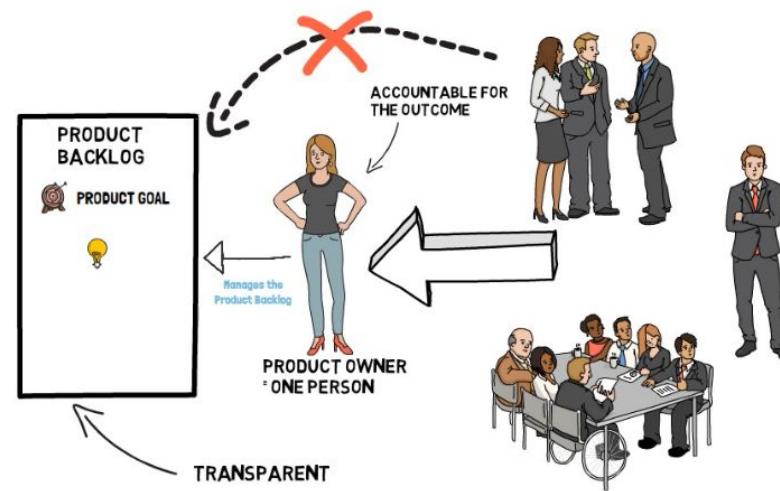
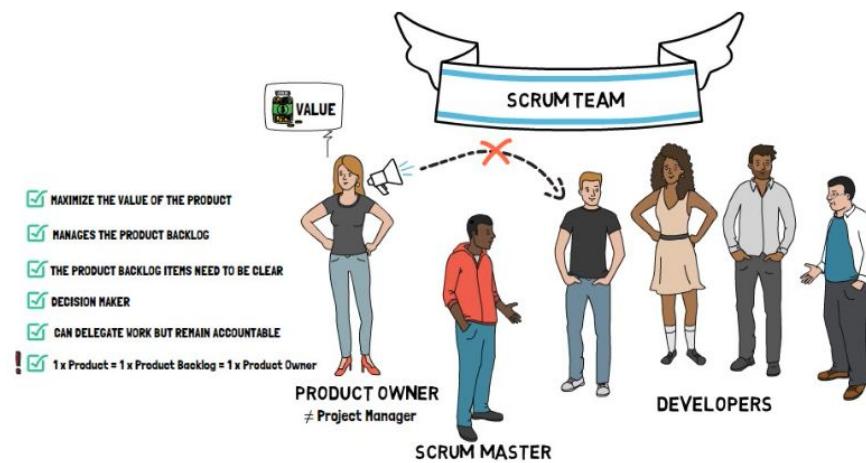
This is just a RECOMMENDATION,  
not a rule!



SMALLER  
PRODUCTIVITY GAINS

The sweetspot is probably in the middle.

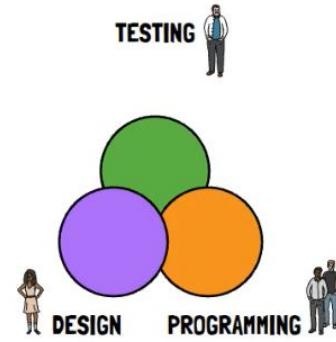
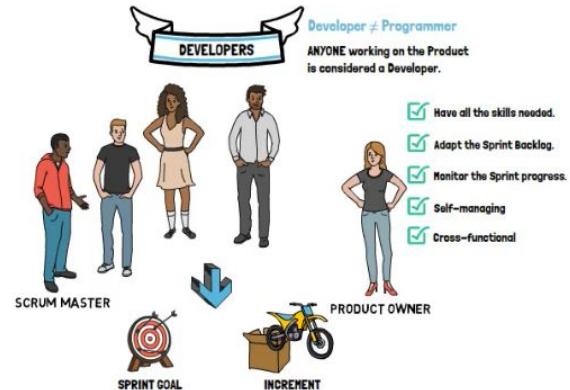
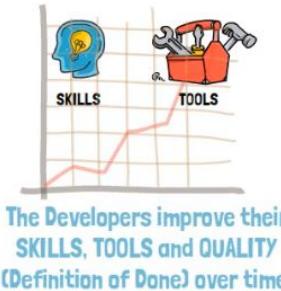
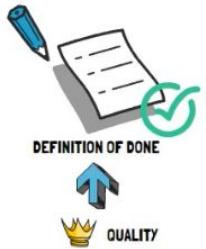
INCREASED COORDINATION  
& COMPLEXITY

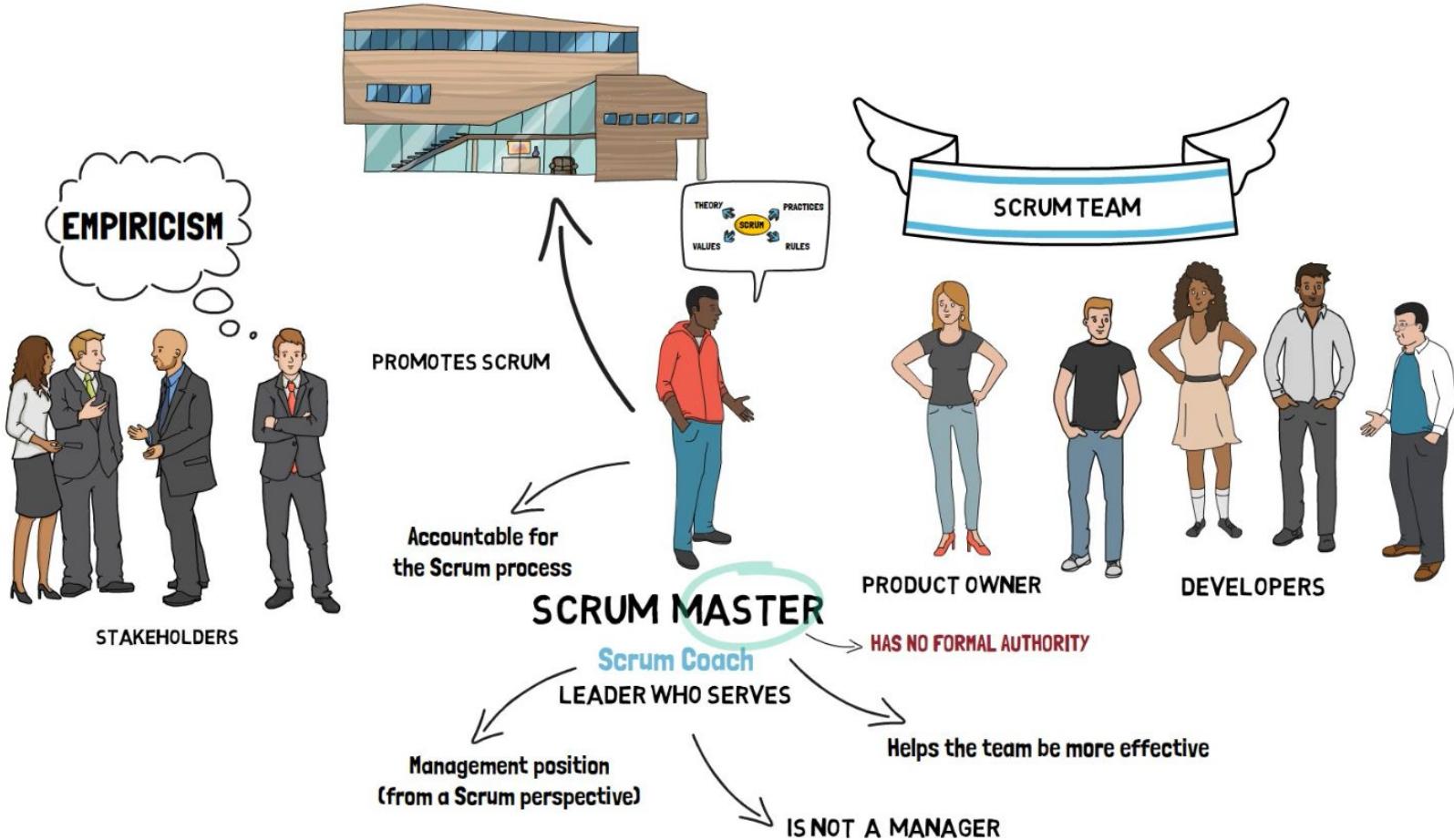


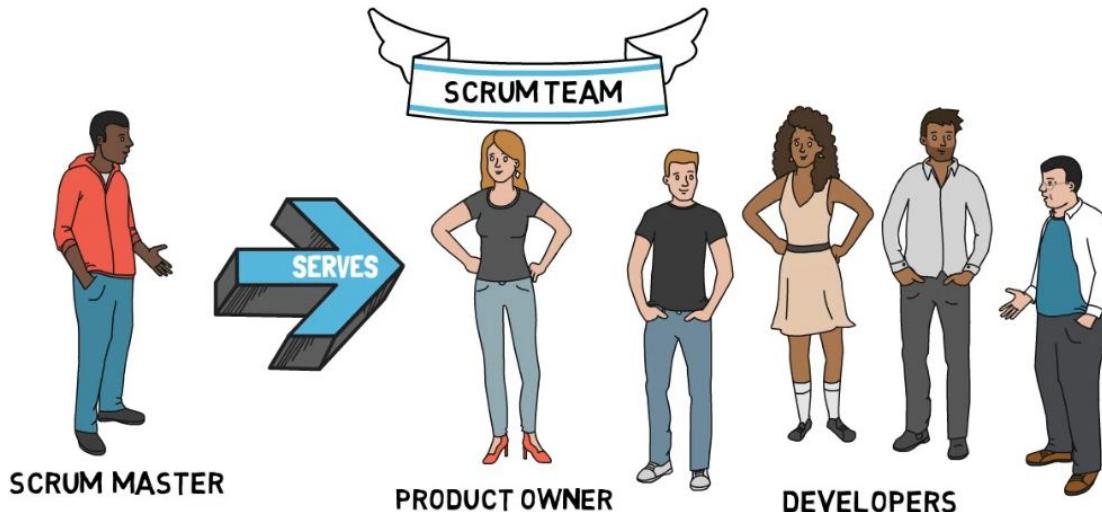


What "VALUE" is depends on the organization and the product.





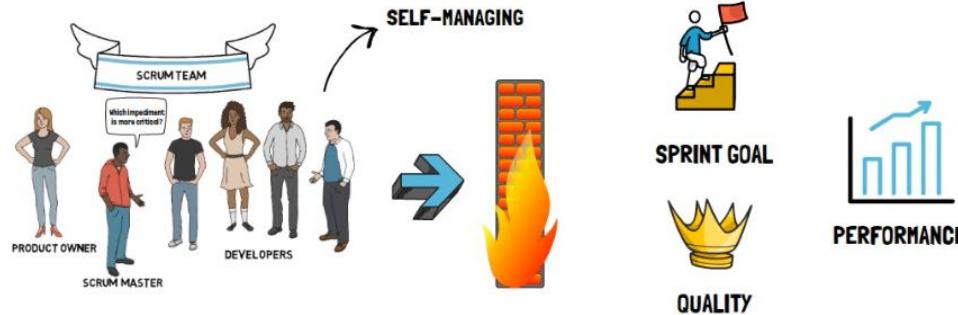


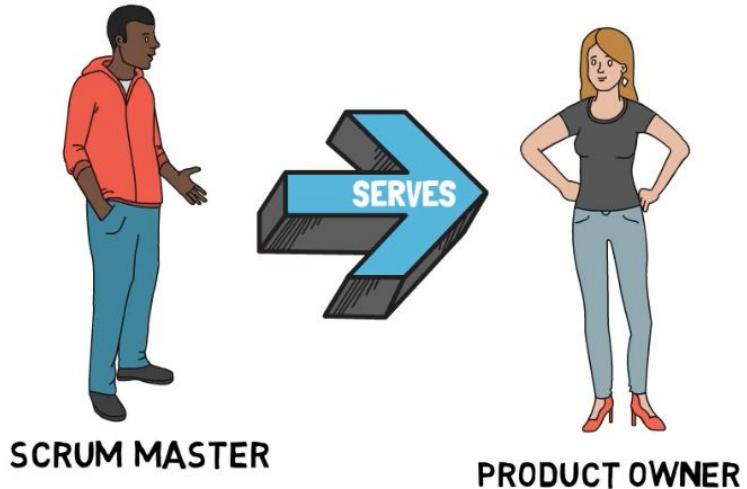


### KEY IDEAS

- Coaches the Scrum Team in self-management and cross-functionality.
- Helps the team to be effective and to create high-value Product Increments.
- Handles impediments.
- Helps the team resolve internal conflicts.
- Facilitates meetings & ensures they are achieving their purpose.
- Helps the Scrum Team understand the Scrum theory and practice.

# What is an IMPEDIMENT?





### KEY IDEAS

- Helps the Product Owner understand the Scrum theory and practice.
- Enhances transparency: Product domain needs to be understood.
- Helps the Product Owner find ways to do effective Product Backlog management.
- Helps the Product Owner understand empirical work.



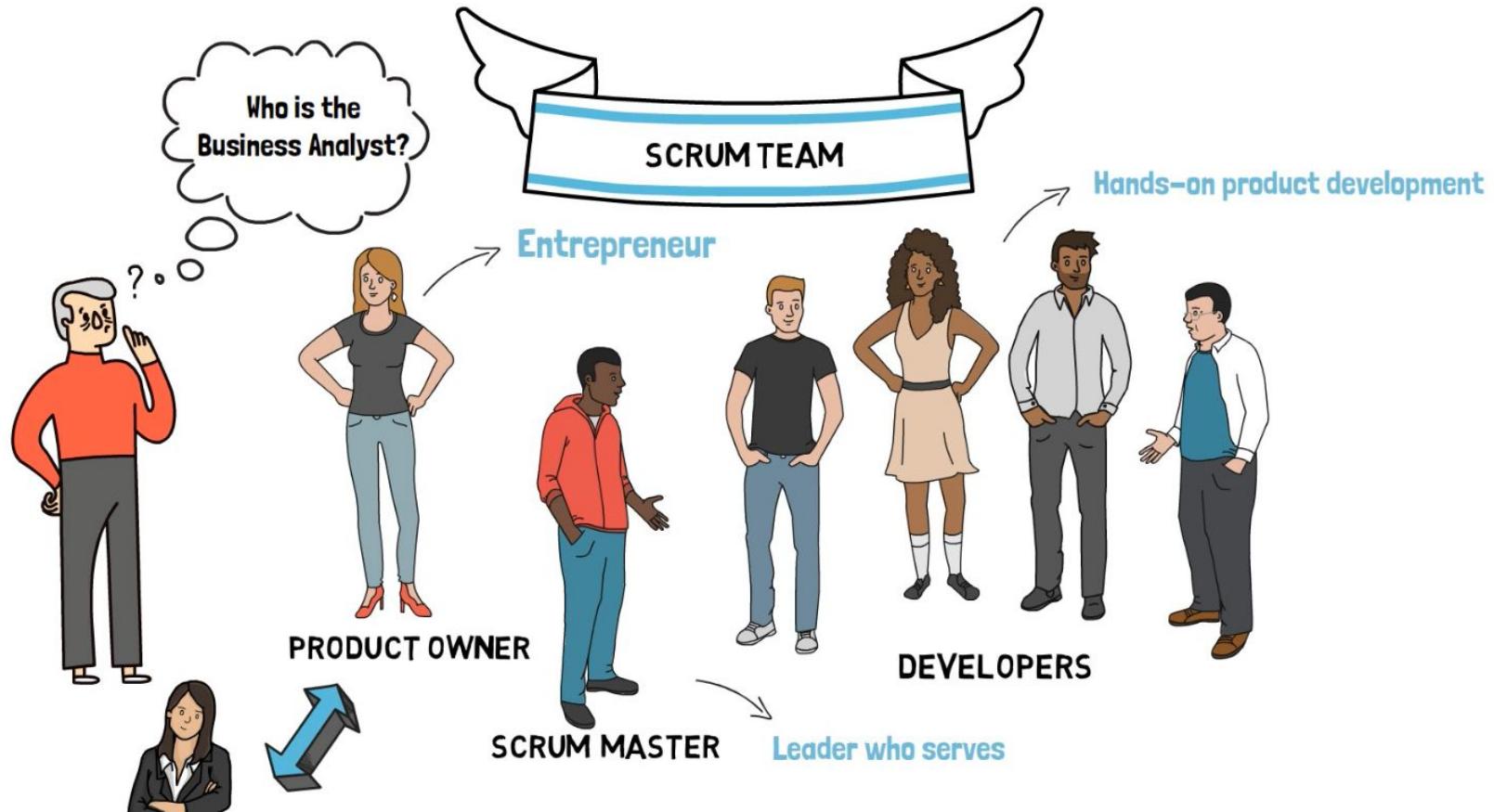
SCRUM MASTER



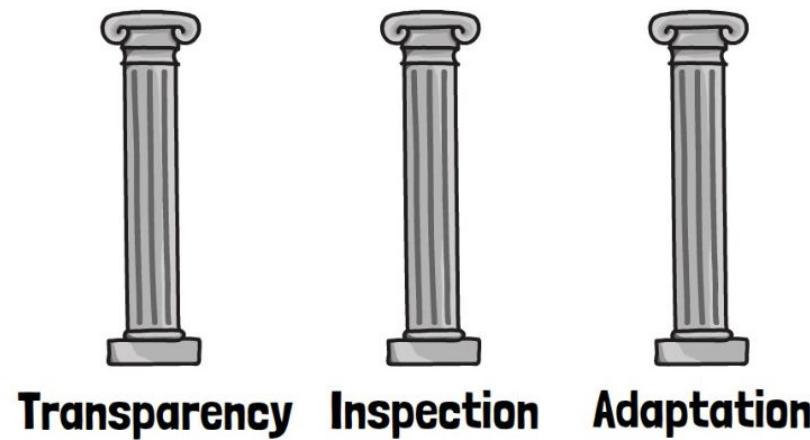
ORGANIZATION

## 💡 KEY IDEAS

- Manages new Scrum implementations.**
- Coaches the organization in its Scrum adoption.**
- Facilitates the collaboration between the Scrum Team and the Stakeholders.**
- Ensures that the Scrum framework is not altered.**



# Scrum Values



# Scrum framework

## RECAP



- 1) Scrum is a **FRAMEWORK**.
- 2) Scrum is **NOT** only used in software development.
- 3) Scrum is based on **EMPIRICISM** and **LEAN THINKING**.
- 4) Empirical Scrum pillars of **TRANSPARENCY**, **INSPECTION**, and **ADAPTATION**.
- 5) Scrum Values: **COMMITMENT**, **FOCUS**, **OPENNESS**, **RESPECT**, and **COURAGE**.
- 6) Scrum should **NOT** be modified.

# SCALING SCRUM



More than one  
Scrum Team is  
working on the  
same Product.



faster development pace



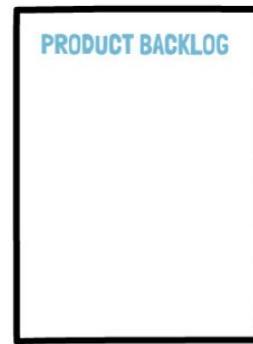
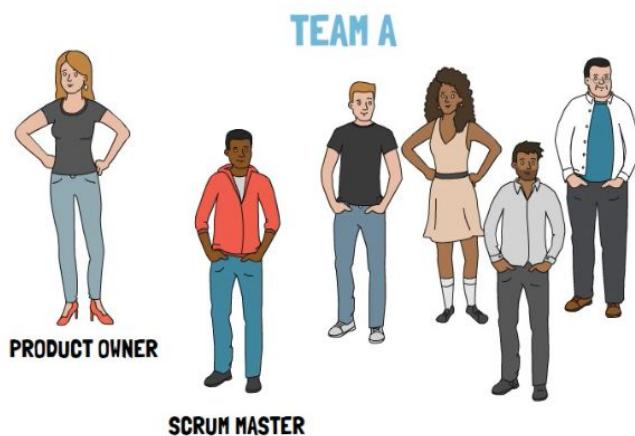
more output



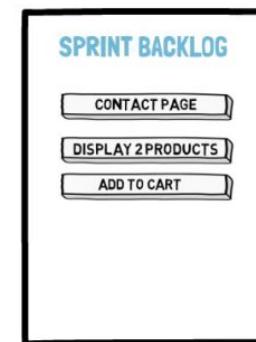
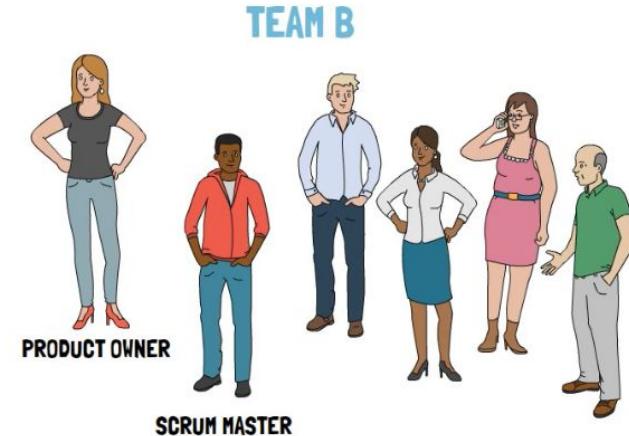
more value

Same Scrum rules  
apply when scaling.

**1 PRODUCT => 1 PRODUCT BACKLOG => 1 PRODUCT OWNER**

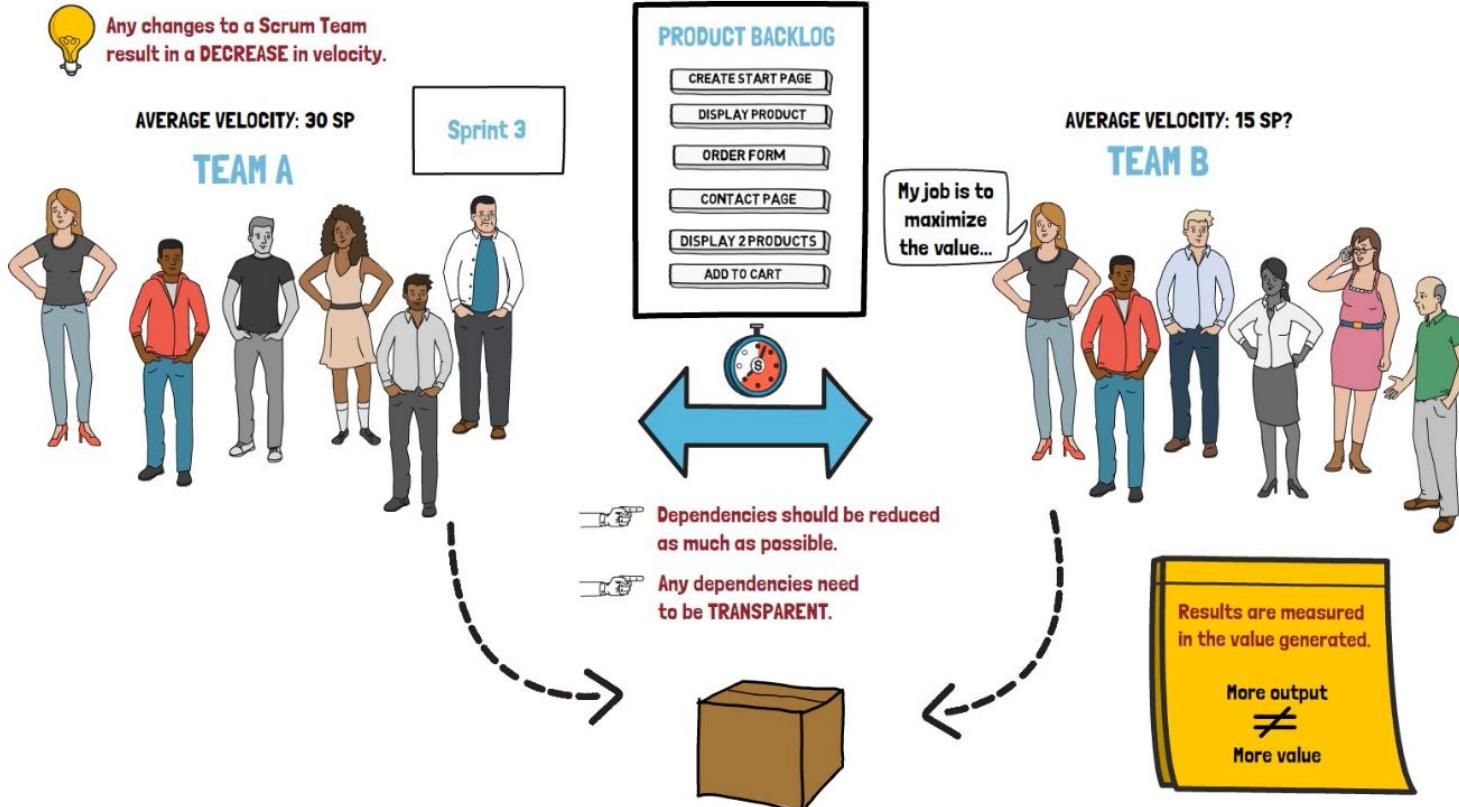


All Scrum Teams share  
**ONE Product Backlog!**

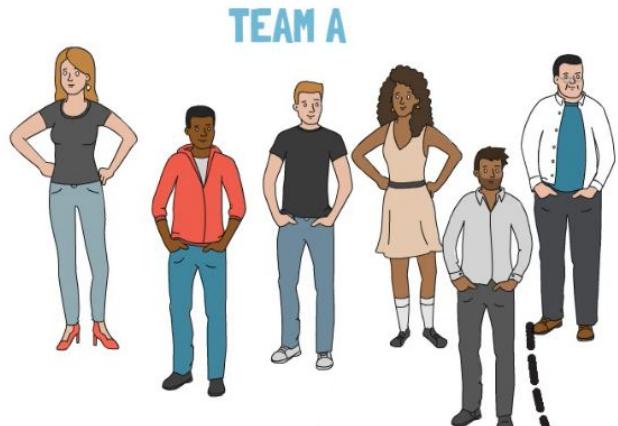


## Impact on velocity when scaling Scrum

Teams should not be compared  
based on their velocity



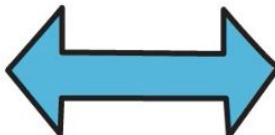
## Integrated Product Increments



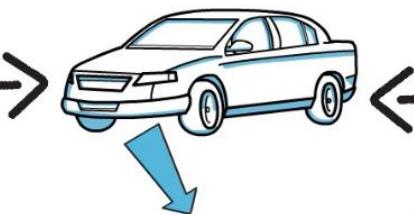
TEAM B



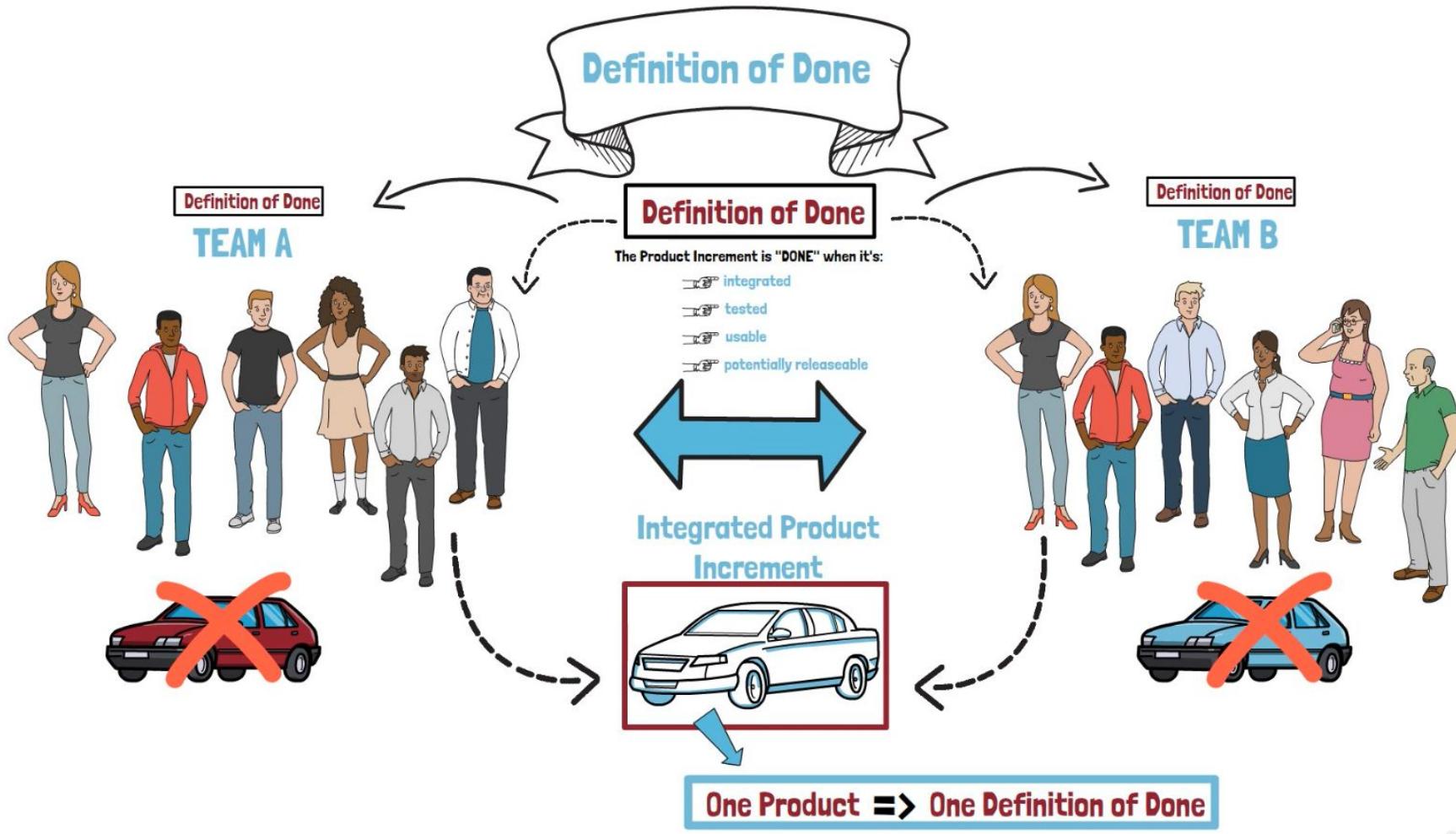
 Separate work is  
not releaseable.



Integrated Product  
Increment



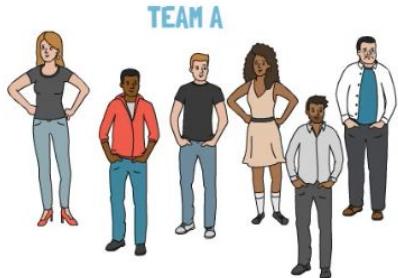
Final Product =  +  + 



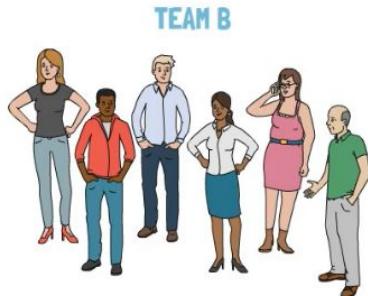
## Aligning Sprints

It may be easier if the Sprints are aligned.

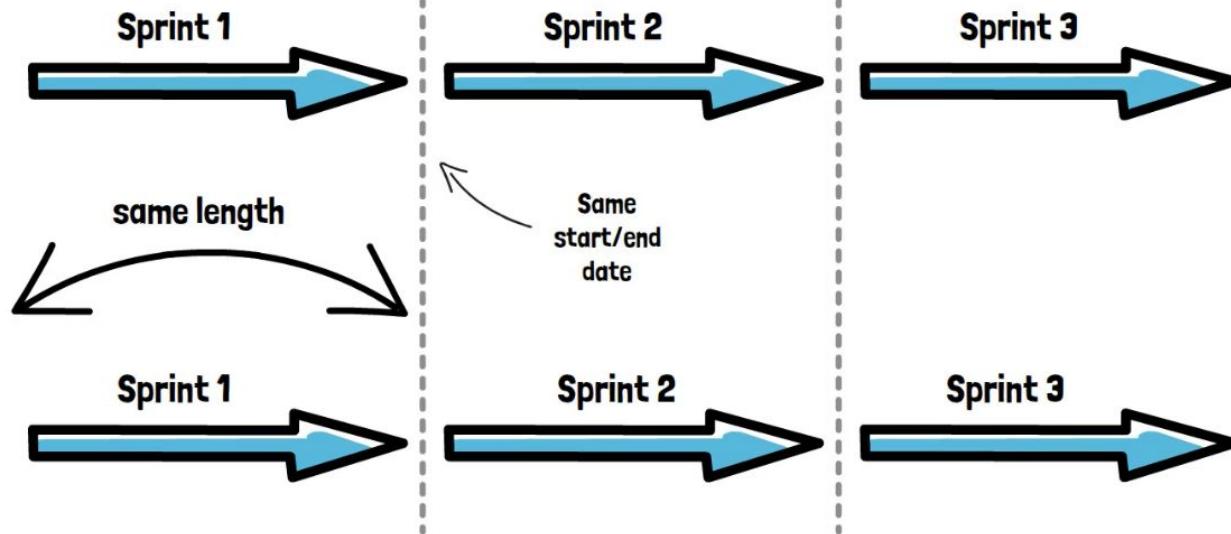
**NOT MANDATORY IN SCRUM!**



TEAM A



TEAM B



How many  
Product Owners?



No Chief Product Owner

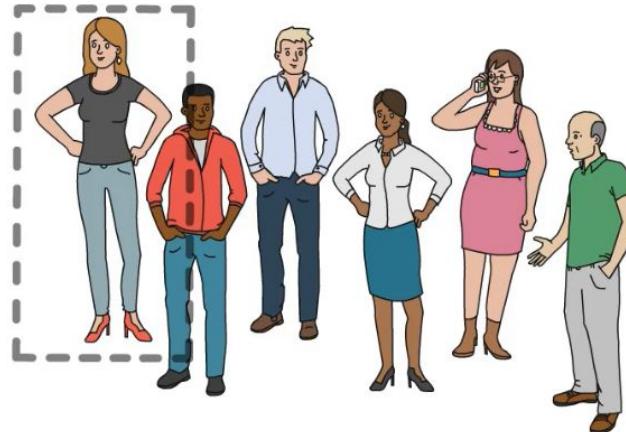


No Proxy Product Owner

TEAM A



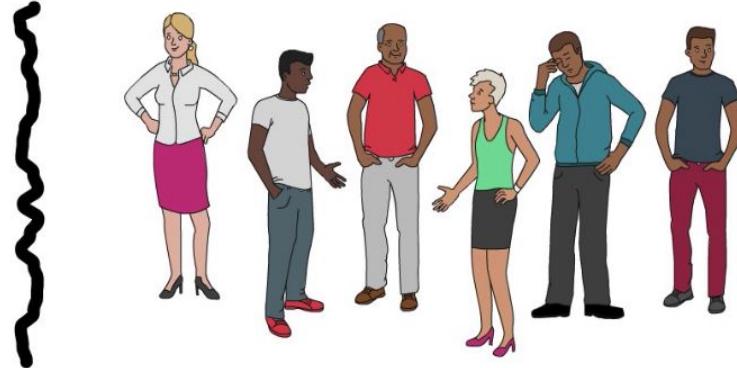
TEAM B



1 Product => 1 Product Backlog => 1 Product Owner (one person)



Team 1



Team 2



**Scrum teams should REDUCE DEPENDENCIES  
& constantly INTEGRATE their work.**



- 1 Product => 1 Product Backlog => 1 Product Owner**
- Scrum Teams must have a SHARED Definition of Done.**
- Each Sprint must produce an INTEGRATED Increment.**

# RECAP

**VELOCITY**

**OPTIONAL metric in Scrum**  
= amount of work completed in a Sprint



The Developers

**NO RELATION TO  
VALUE.**



# NFRs

**PERFORMANCE** – Each transaction must complete in under 2 seconds.

**AVAILABILITY** – At peak times, the platform should support 5000 concurrent transactions.

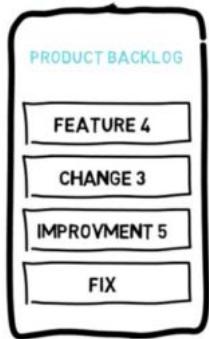
**SECURITY** – All the external code libraries must go through a security testing tool to ensure no known vulnerabilities are included.

**USABILITY** – Must support visually impaired customers & follow the best practices in the industry.

**REGULATORY COMPLIANCE** – GDPR compliant.



# Requirements are in the

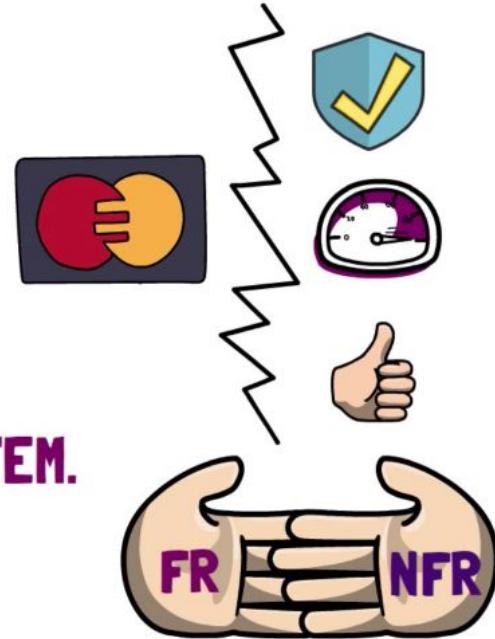


## MIX of FRs & NFRs, in the same PRODUCT BACKLOG ITEM.



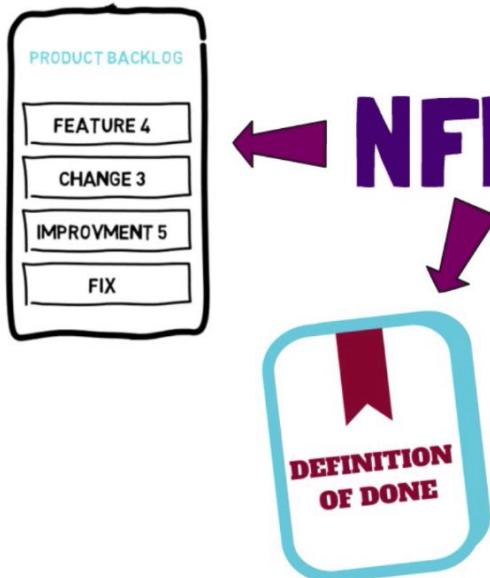
Once a **PERFORMANCE-RELATED NFR** has been implemented in the Product, we want to ensure that any improvements stay **LONG-TERM**.

A new feature could **NEGATIVELY IMPACT** performance.



# RECAP

MIX of  
FRs &  
NFRs



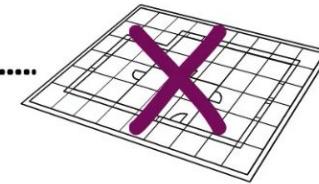
1. Added to the Product Backlog
2. Implemented during a Sprint
3. Added to the Definition of Done

We DON'T dedicate Sprints  
SOLELY to addressing NFRs



# Waterfall Projects

## stages



It makes little sense to create SOMETHING FINAL  
when you have the LEAST AMOUNT OF INFORMATION.

EMERGENCE → NEW INFORMATION

Emergence is a process in which new information comes to light, and it  
usually happens sprint after



**There are NO DEDICATED SPRINTS  
ONLY for the ARCHITECTURE.**

**EMERGE** = **REVEALED  
DISCOVERED**

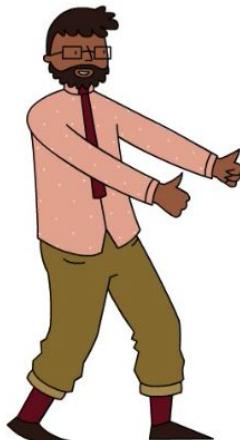


**AGILE MANIFESTO  
PRINCIPLES**

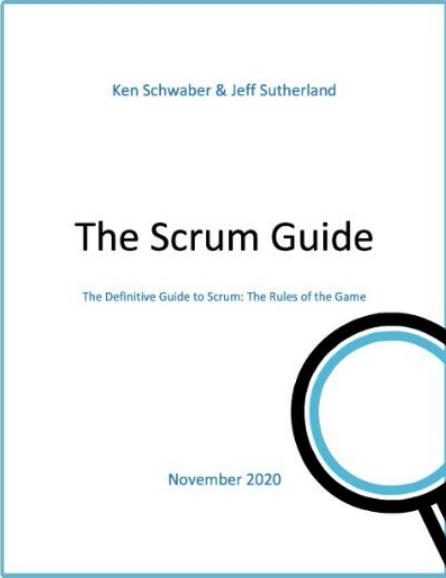


We cannot **ANTICIPATE**  
**EVERYTHING!**

# AGILE



**CHANGING REQUIREMENTS**  
**re-work as part of the process**



Ken Schwaber & Jeff Sutherland

## The Scrum Guide

The Definitive Guide to Scrum: The Rules of the Game

November 2020



## DOCUMENTATION

- 👉 **not mandatory**
- 👉 **not forbidden**





**DOCUMENTATION**

👉 **assembly instructions**

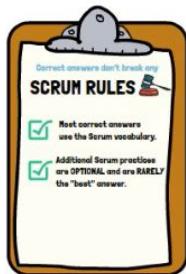
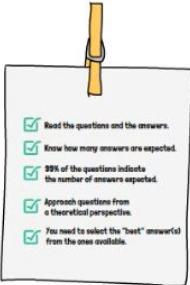
👉 **user manuals**

👉 **regulatory aspect** 

👉 **technical documentation**  

👉 **NOT only user documentation**

## How to approach Scrum questions



### PROCESS OF ELIMINATION



#### Correct answers should:

- Respect the Scrum rules & accountabilities.
- Respect the Scrum Values.
- Help with empiricism.
- Encourage self-management.



### LANGUAGE

#### Words that indicate something is absolute:

complete, detailed, every, all, proper, correct, right, required, mandatory, ...

#### Modal verbs:

can, could, may, should, must, have to ...

The Scrum Team MUST add AT LEAST ONE improvement to the Sprint Backlog. FALSE

EVERY item in the Sprint Backlog MUST be decomposed by the end of the Sprint Planning meeting. FALSE

#### Negators:

NOT, FALSE, ...

Which of the following is NOT a characteristic of ...

Which of the following statements is FALSE in regards to ...

#### Other words:

Usually, typically, commonly, normally, ...

The Scrum Team usually adds at least one improvement to the Sprint Backlog. TRUE

Automatically



### FOCUS ON THE THEORY

### DON'T MAKE ASSUMPTIONS



# Scrum Events

All Scrum events should be held at the **same time** and **place** to reduce complexity.

Scrum defined five mandatory Scrum events: the **Sprint** (as a container for all events), **Sprint Planning**, **Daily Scrum**, **Sprint Review**, and **Sprint Retrospective**. \*

The Product Backlog refinement activity is NOT a mandatory Scrum event.

	SPRINT	SPRINT PLANNING	DAILY SCRUM	SPRINT REVIEW	SPRINT RETRO
TIME-BOX	1 MONTH OR LESS	8 HOURS	15 MINUTES	4 HOURS	3 HOURS
WHO ATTENDS	SCRUM TEAM + STAKEHOLDERS	SCRUM TEAM	DEVELOPERS	SCRUM TEAM + STAKEHOLDERS	SCRUM TEAM
OPTIONAL ATTENDANCE	ANYONE ELSE INVOLVED	PEOPLE INVITED BY THE SCRUM TEAM	IDEALLY NOBODY BUT THE DEVS CAN INVITE PEOPLE	-	-
PURPOSE	BUILD AN INCREMENT + REACH SPRINT GOAL	PLAN THE SPRINT BY DEFINING A SPRINT GOAL + CREATING A PLAN	INSPECT PROGRESS + PLAN THE NEXT 24H	INSPECT THE INCREMENT + ADAPT THE PRODUCT BACKLOG	INSPECT THE DEV PROCESS + IDENTIFY IMPROVEMENTS
INPUTS	-	PRODUCT BACKLOG PAST PERFORMANCE UPCOMING CAPACITY DEFINITION OF DONE	HOW IS THE TEAM DOING TOWARD THE SPRINT GOAL	SPRINT OUTCOME INCREMENT PRODUCT BACKLOG BUSINESS CONDITIONS	INDIVIDUALS, INTERACTIONS, PROCESSES, TOOLS, DEFINITION OF DONE
OUTPUTS	PRODUCT INCREMENT	SPRINT BACKLOG	UPDATED SPRENT BACKLOG	UPDATED PRODUCT BACKLOG	ITEMS ADDED TO SPRENT /PRODUCT BACKLOG ADAPTED DOD
SCRUM TEAM	COLLABORATE TO REACH THE SPRINT GOAL	DEFINE THE SPRINT GOAL	-	COLLABORATE WITH THE STAKEHOLDERS	COLLABORATE TO IDENTIFY IMPROVEMENTS
DEVELOPERS	BUILD THE INCREMENT	CREATE SPRINT FORECAST + PLAN	UPDATE THE SPRENT BACKLOG		
PRODUCT OWNER	MANAGE THE PRODUCT BACKLOG	COLLABORATE WITH THE DEVELOPERS	-		
SCRUM MASTER	ESTABLISH SCRUM	ENSURE THE MEETING HAPPENS, EVERYONE UNDERSTANDS THE PURPOSE, MEETING IS POSITIVE & PRODUCTIVE, TIME-BOX IS RESPECTED			

# **Manifesto for Agile Software Development**

We are uncovering better ways of developing software by doing it and helping others do it.

Through this work we have come to value:

**Individuals and interactions** over processes and tools

**Working software** over comprehensive documentation

**Customer collaboration** over contract negotiation

**Responding to change** over following a plan

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

# **Principles behind the Agile Manifesto**

*We follow these principles:*

Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.

Business people and developers must work together daily throughout the project.

Build projects around motivated individuals.  
Give them the environment and support they need,  
and trust them to get the job done.

The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

Working software is the primary measure of progress.

Agile processes promote sustainable development.  
The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

# Continuous attention to technical excellence and good design enhances agility.

[rg/principles.html](#)

1

Principles behind the Agile Manifesto

Simplicity--the art of maximizing the amount  
of work not done--is essential.

The best architectures, requirements, and designs  
emerge from self-organizing teams.

At regular intervals, the team reflects on how  
to become more effective, then tunes and adjusts  
its behavior accordingly.

# Standard of Conduct for Assessments

Scrum.org relies on each individual to act with integrity and uphold high-standards among themselves and their peers.

By taking a Scrum.org certification assessment you are affirming that:

- You have only one account.
- You are the individual whose name appears on the start page.
- While you are taking the assessment you will not consult with other individuals.
- You have not received any of the answers to the questions in advance.
- All answers to questions are your own work.
- You will not plagiarize the work of others.
- You will not share any of the assessment materials with any other individuals.
- If you become aware of any violations of this Standard of Conduct you are obliged to report it to support@scrum.org (<mailto:support@scrum.org>). Your information will never be shared with others.

Failure to meet these standards of conduct may result in your Scrum.org certifications being revoked and your Scrum.org account being disabled.

End of File