



SCRUM

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Szczecin, 18.11.2018

1. Agile and Lean

Let's discuss basics



The Agile Manifesto

Agile Alliance – unformal group of independent software professionals who met on February 11-13, 2001 at ski resort in the Wasatch mountains of Utah. During the meeting those 17 „lightweight methodologists” found common ground and signed a **Manifesto for Agile Software Development**

The Agile Manifesto

- **Individuals and interactions over processes and tools**
- **Working software over comprehensive documentation**
- **Customer collaboration over contract negotiation**
- **Responding to change over following a plan**

The Agile Manifesto - 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.

The Agile Manifesto - Principles

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.

The Agile Manifesto - Principles

**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.**

The Agile Manifesto - Principles

**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.**

The Agile Manifesto - Principles

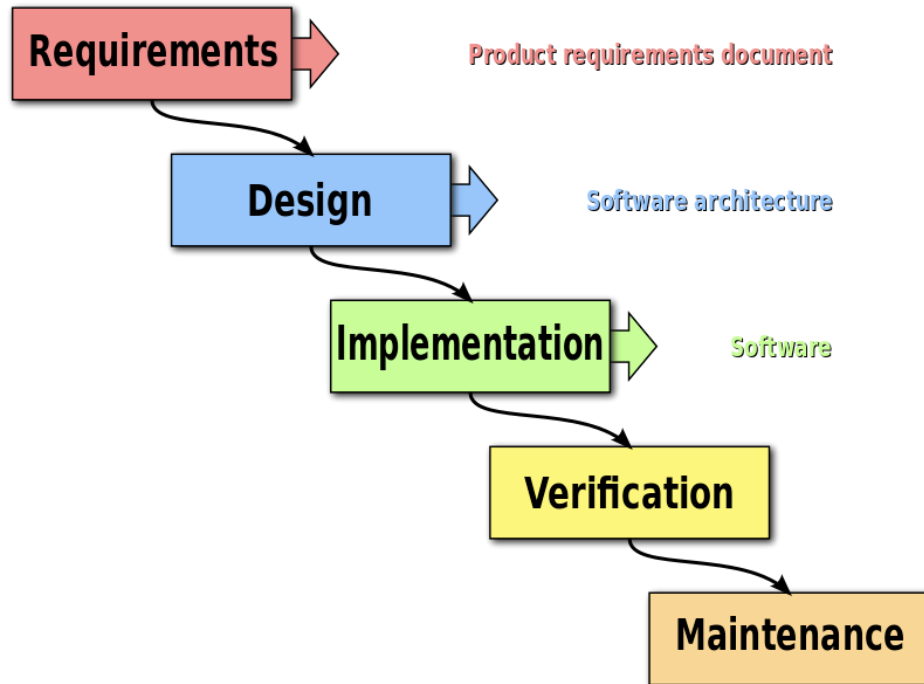
Simplicity--the art of maximizing the amount of work not done--is essential.

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.



Waterfall vs Agile





Muri (Load)

Lean - Muri, Muda, Mura



Muda (Flow)



Mura (waste)

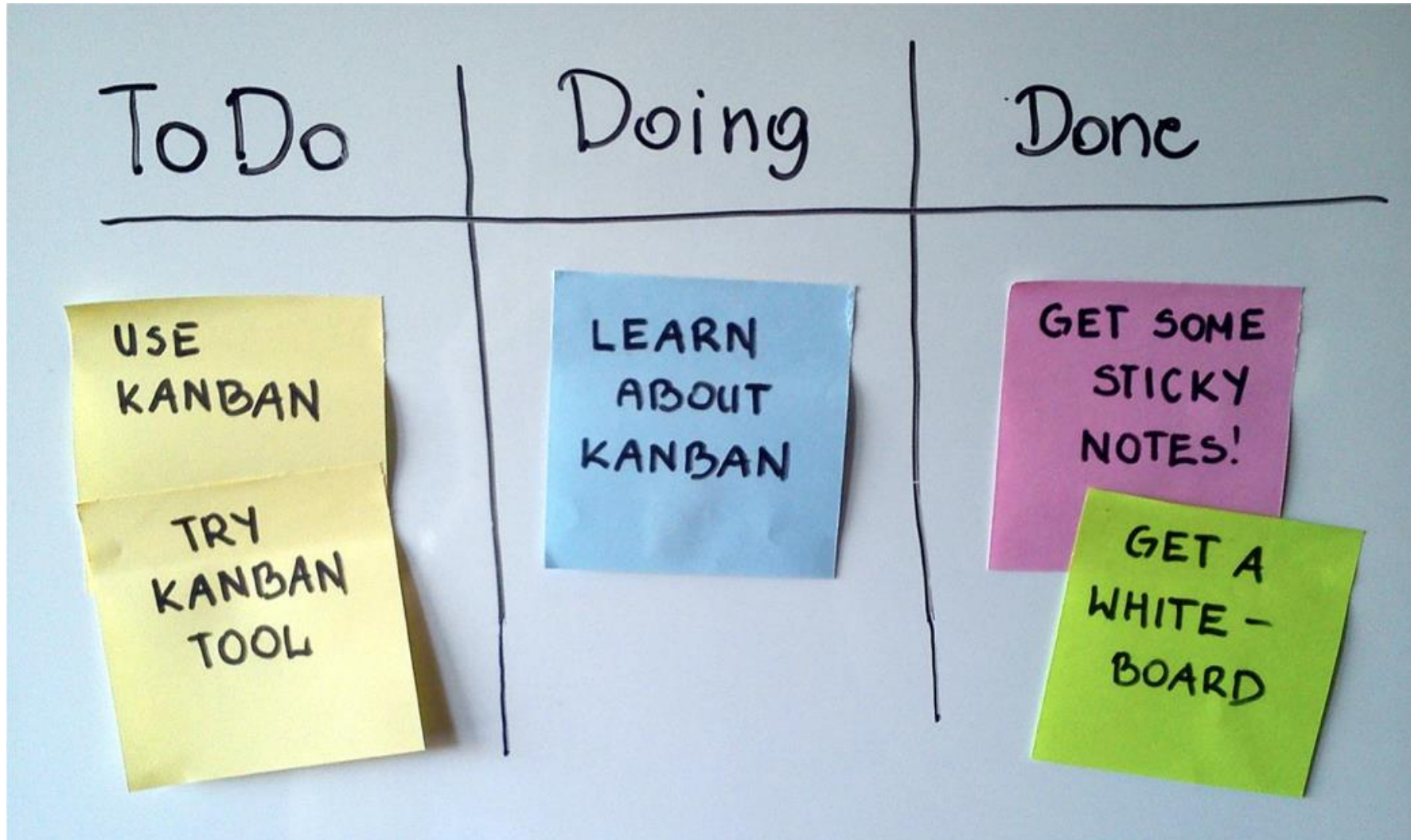
Lean Concepts

- Muri - The concept of not overloading processes.
- Muda - The concept of keeping the flow smooth and even.
- Mura - The concept of removing the Non-Value adding activities.

Lean Principles

- Eliminate Waste
- Build Quality In
- Create Knowledge
- Defer commitment
- Respect People
- Optimize the Whole
- Deliver as fast as possible

Kanban



Kanban rules

- No deficiencies.
- No delays.
- No stockpiling.
- No queues as no one can be idle at any stage of the production process.
- No unnecessary technological operations nor control ones.

What is SCRUM?

Not only a rugby term



What is SCRUM?

Scrum is a simple framework used to organize teams and get work done more productively with higher quality.

What is SCRUM?

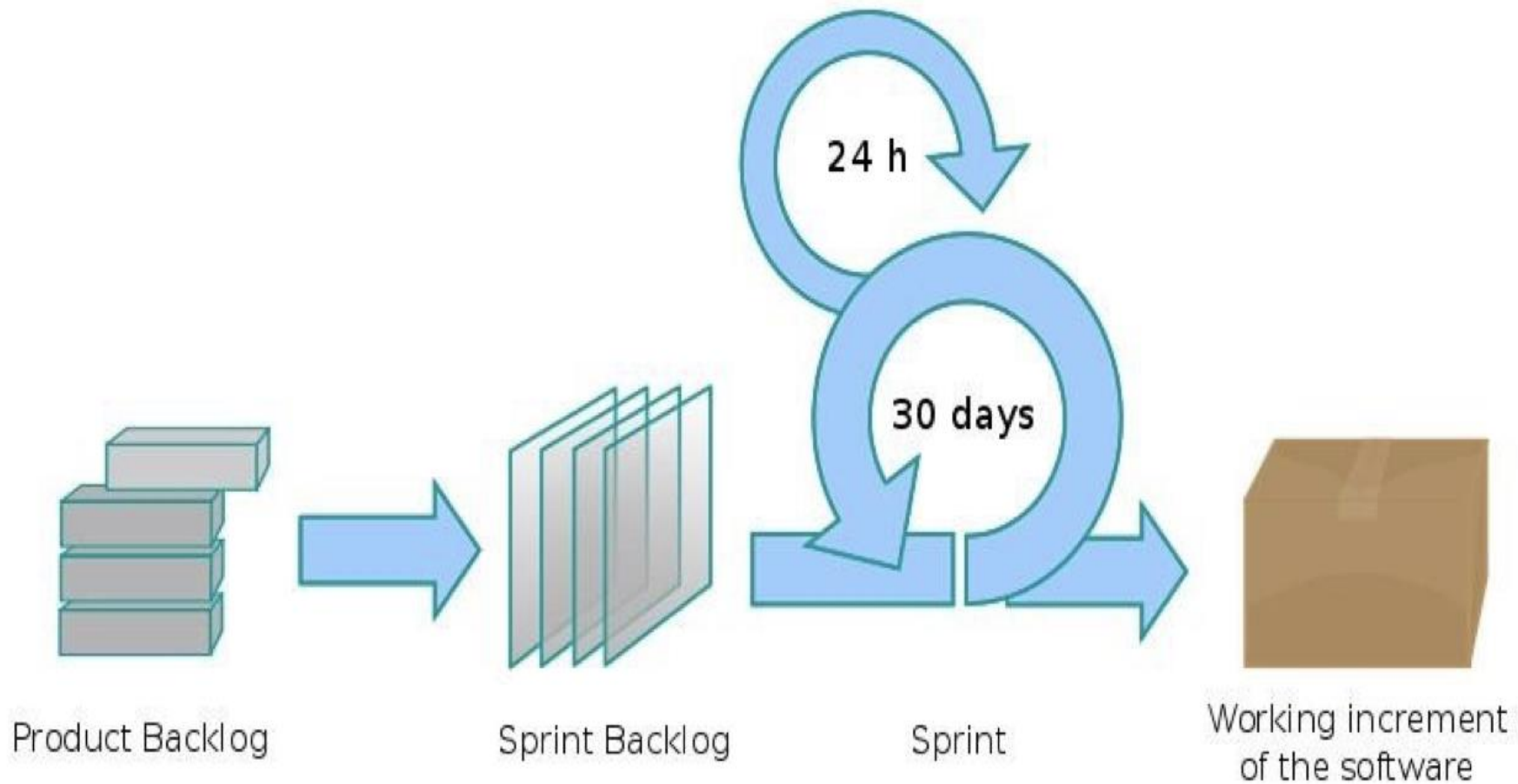
The term itself (“Scrum”) was introduced by Takeuchi and Nonaka (1986). The study was published in Harvard Business Review in 1986. They explain that projects using small, cross-functional teams historically produce the best results. They relate these high performance teams to “Scrum” formations in Rugby.

Scrum for software development was introduced in 1993

Scrum characteristics

- Teams can choose the amount of work to do in one iteration and how to best fulfill the agreed goal.
- Focus on prioritizing the work based on Business Value, improving the customer satisfaction by releasing what is needed and at the right time.
- Allow to adapt to changing requirements at regular short intervals without big impact on the product development.
- Allow to deliver working software at regular intervals.

Scrum characteristics



SCRUM Roles



Scrum Master

- Master-Servant for the team. Leads and coaches but also removes all obstacles and impediments from the road ahead.
- Facilitates all SCRUM ceremonies.
- Improves processes in the team(s) and organisation.



Product Owner

- Owns the Product Backlog.
- Owns the business side of the project/product.
- Owns the project vision.
- Responsible for gathering stakeholders needs and expectations and translating them into stories/tasks.



The Team

- Self-organising entity composed of 3-10 people (typically 5-9).
- Interdisciplinary, cross-functional group of professionals.
- They do the work necessary for delivering a potentially releasable increment that fulfils the “Done” definition.



Tuckmans group development stages

- **Forming**
- **Storming**
- **Norming**
- **Performing**



SCRUM Ceremonies

Not only stand-ups.



Planning

Communicates the scope of work that will likely be done during a sprint.



Daily stand-ups

Time boxed to 15 minutes.

Answer 3 questions:

1. What did I do yesterday?
2. What do I plan to do today?
3. Is there anything blocking me from obtaining my goals?



Sprints

Time interval that is used by the team to deliver increments.



Sprint Reviews

Summary of what's been done
(and what hasn't) in the sprint
that'd ended.



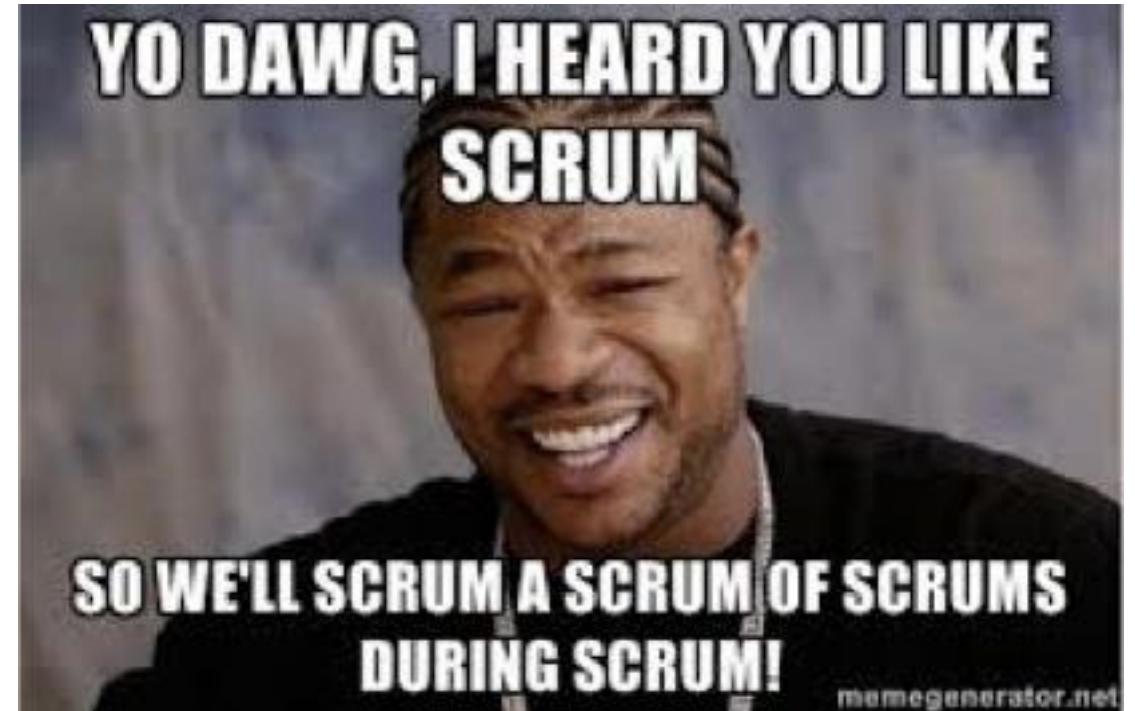
Sprint Retrospectives

Meeting that allows to improve the quality of delivered work.



Scrum of Scrums

Meeting that allows to coordinate work between the Scrum teams.

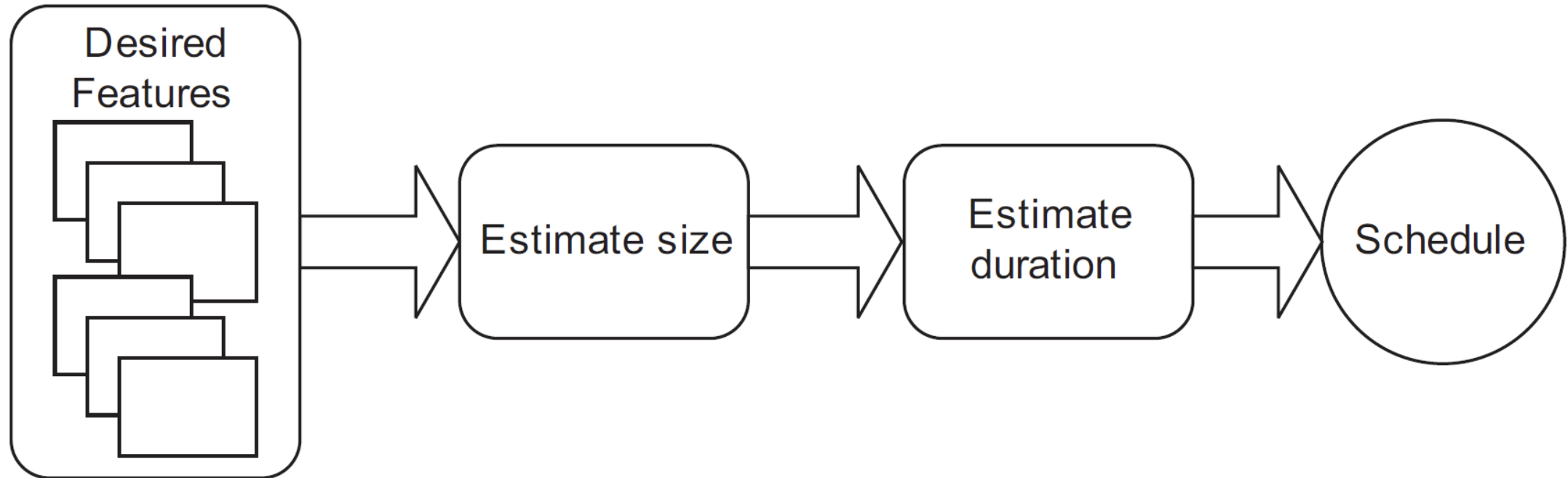


Backlog Refinement/Grooming

Meeting that allows to keep the Backlog tidy and up-to-date.



Estimating



Estimating

Story points are a unit of measure for expressing the overall size of a user story, feature, or other piece of work.

Ideal days are the imaginable amount of time that would be spent on the project if there were no interruptions (including email checking), everybody was working full time at full speed without any vacations and everything needed was present from the day one

T-shirt sizes are easy to comprehend (as we all buy clothes) but harder to count if a team wants to know its velocity.

Estimating - velocity

Velocity is a measure of a team's rate of progress. It is calculated by summing the number of story points (or ideal days) assigned to each user story that the team completed during the iteration.

Planning poker

All team members should participate (PO does not estimate)

1. Each estimator is given a deck of cards that read 0, 1, 2, 3, 5, 8, 13, 20, 40, 100
2. Each user story is read and clarified by team and PO
3. Each estimator privately selects a card representing estimate
4. All cards are simultaneously turned over
5. If estimates differ, the high and low estimators explain their estimates and story can be estimated once again

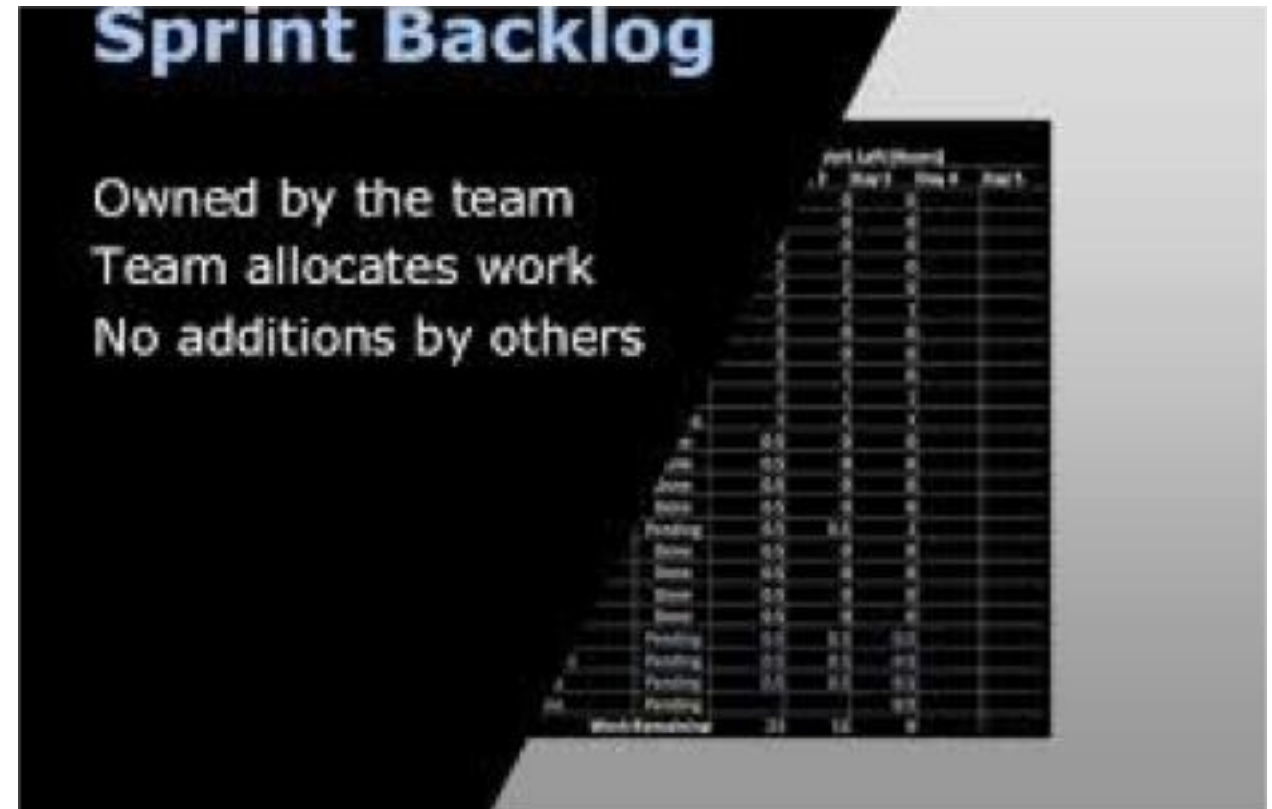
SCRUM Artifacts

Backlog and stuff.



Sprint Backlog

Place of storing for team's commitment for a sprint.



Product Backlog

Stores Product Owner's requirements for project/product.

Product Backlog

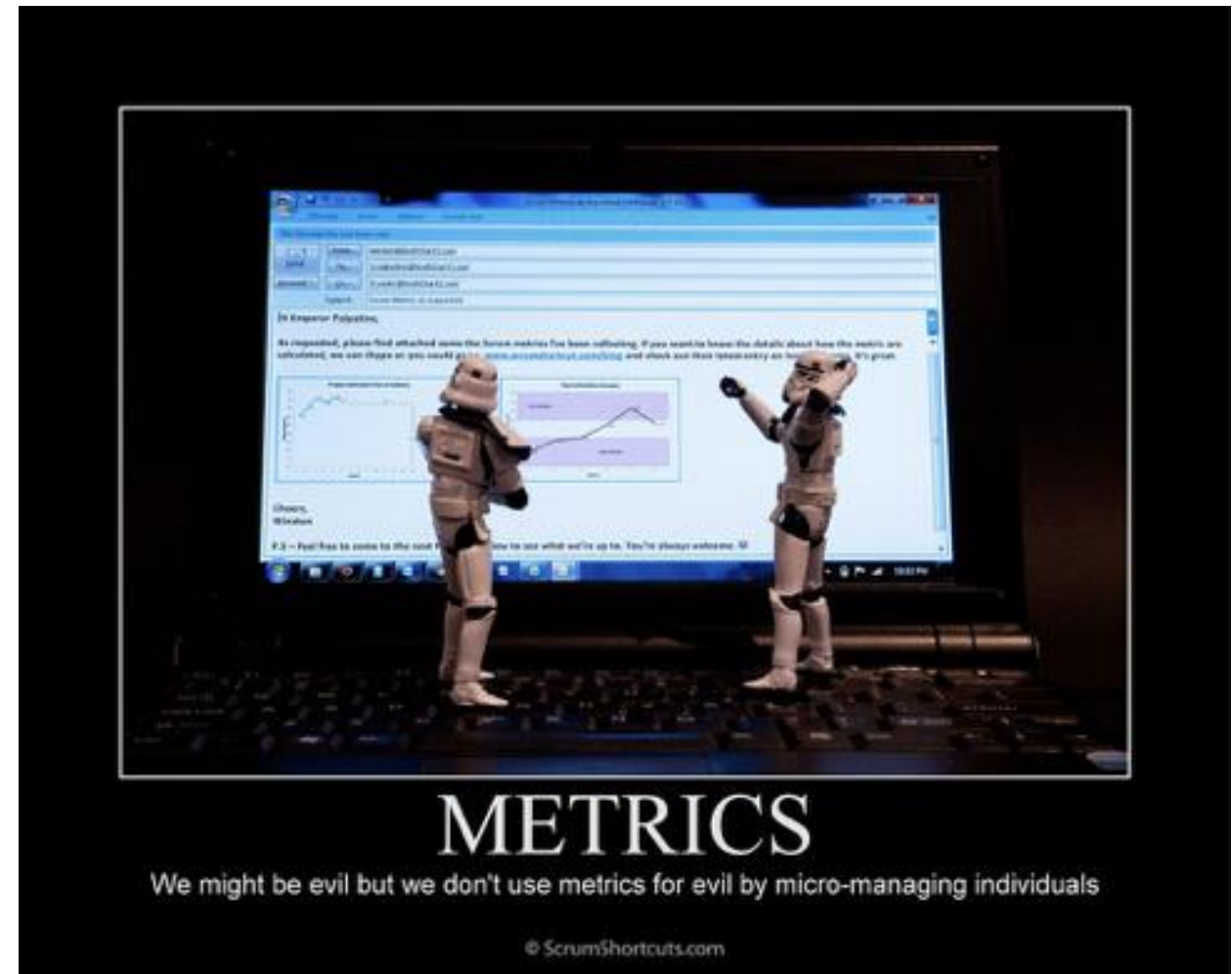
Owned by Product Owner
High-level requirements
Expressed as business value
Not complete, nor perfect
Expected to change & evolve
Limited view into the future

	Est	By
	16	KH
	8	KH
	-	-
	16	TG
	16	TG
	160	TG
	250	MC
	-	-
	24	KH
	24	AM
	-	-
	4	JM
	-	-
show	8	TG
	-	-
	16	T&A
ers	16	T&A
	12	T&A
	-	-
	400	T&M
	400	T&M
	240	T&M
	240	T&M
	320	T&M

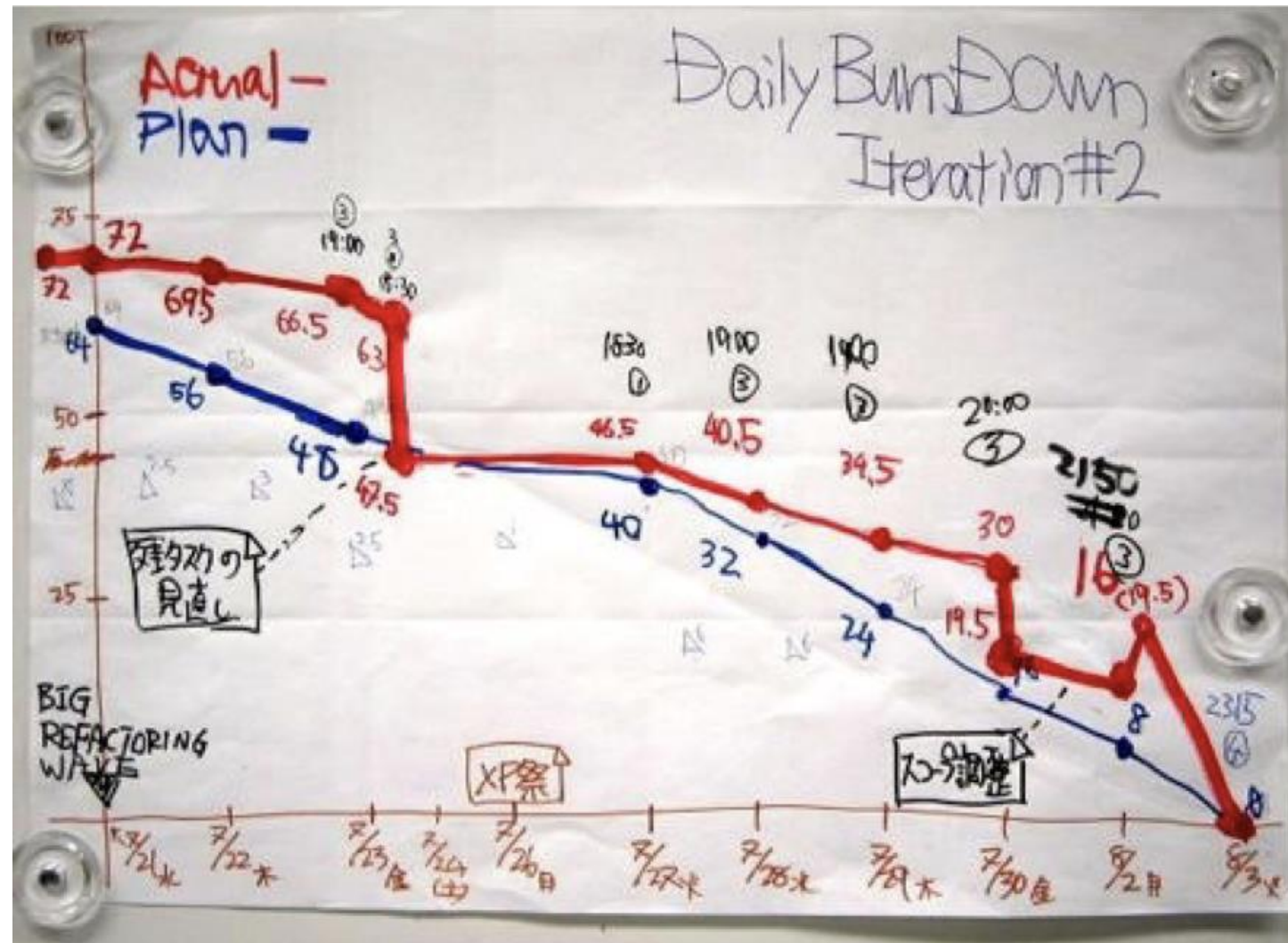
Apple, Jorgin, The Zen of Screen, Sideshare.

Metrics

Product Increment, Sprint Burn-Down Chart, Release Burn-Down Chart.

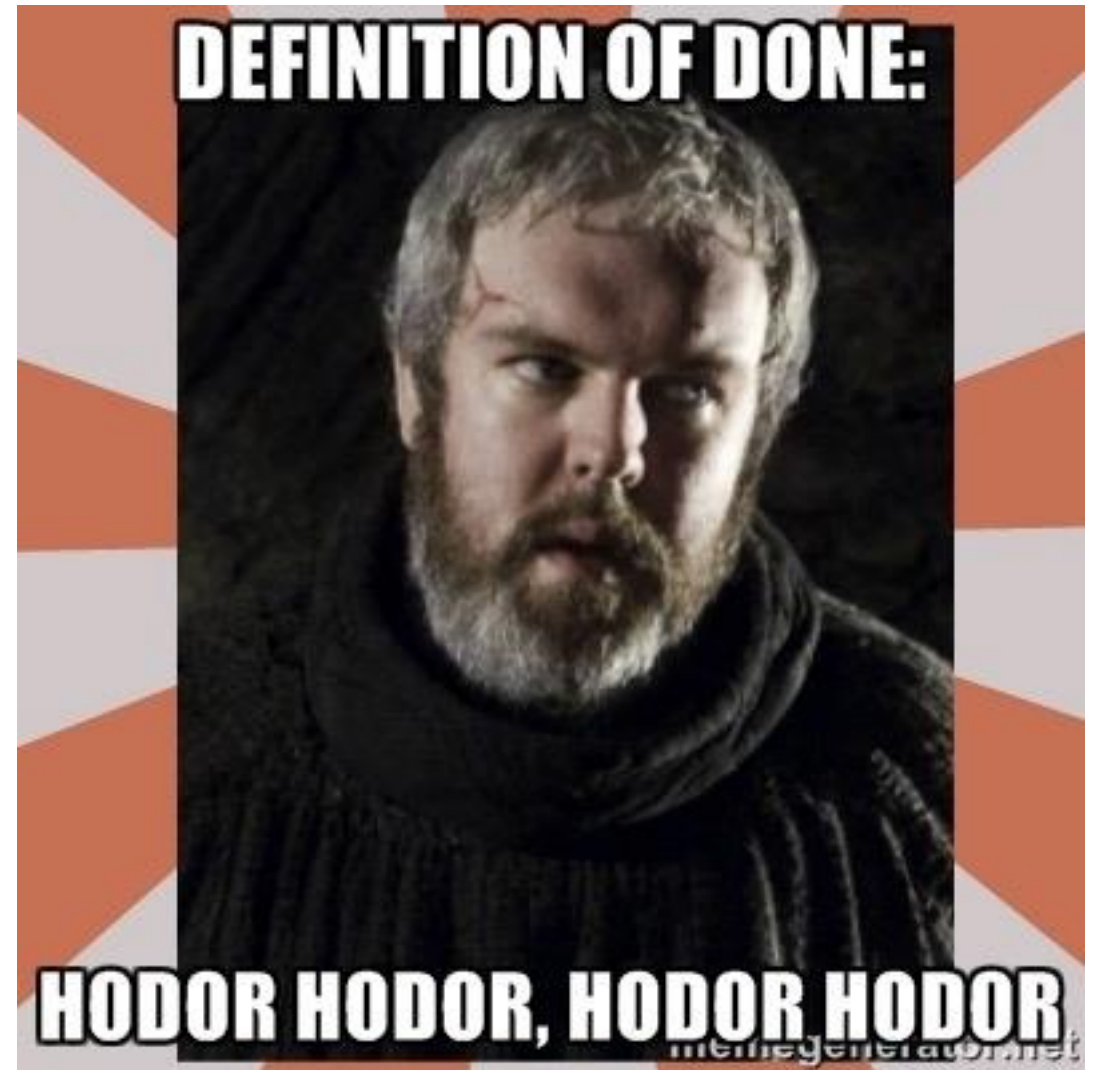


Burndown chart



Definition of Done

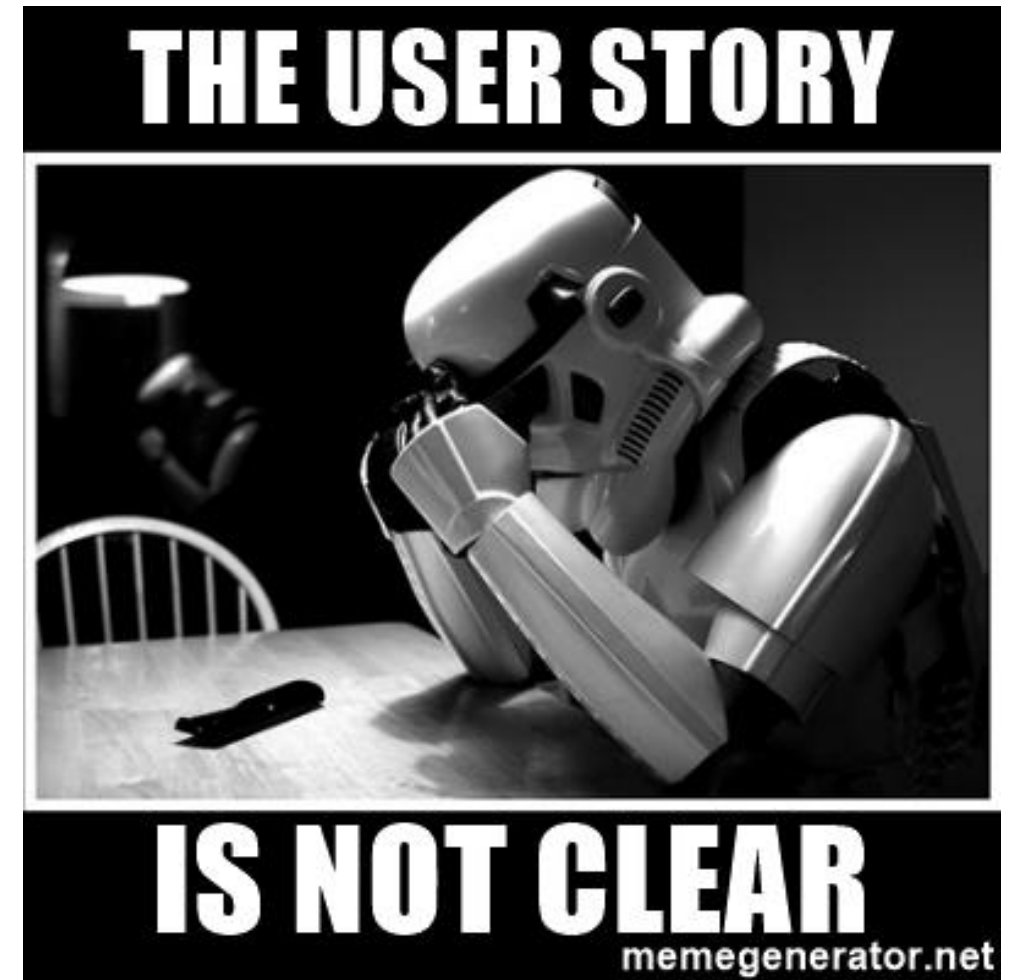
What constitutes “Done” for the incrementation.



User story

User story is a brief description of functionality as viewed by a user or customer of the system:

**As a <type of user>,
I want <capability> so that
<business value>**



I.N.V.E.S.T. in your stories!

- Independent
- Negotiable
- Valuable
- Estimable
- Sized appropriately
- Testable

Acceptance criteria

Acceptance Criteria are the requirements that have to be met for a story to be assessed as complete.



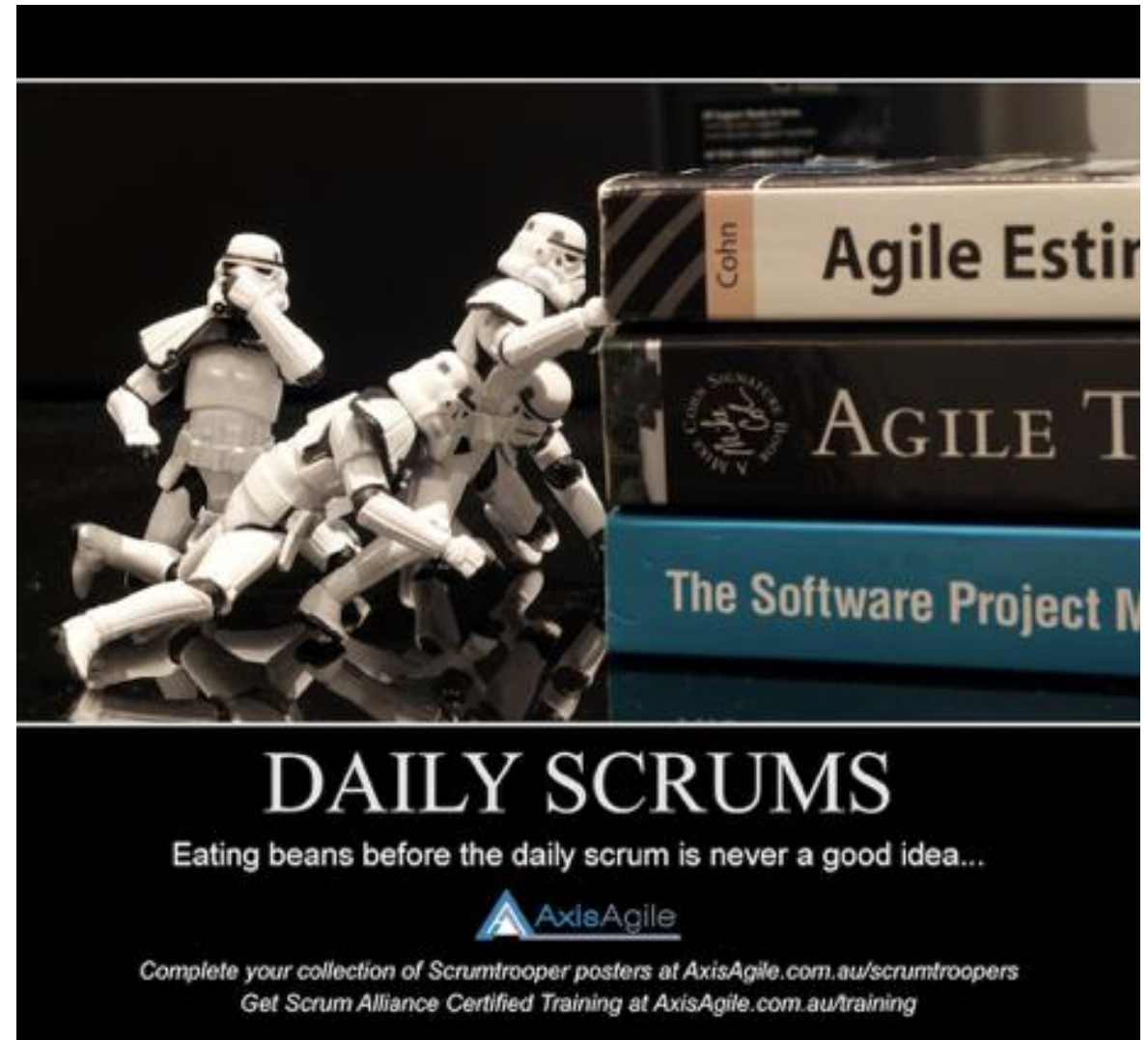
Acceptance criteria

They are incredibly important in Scrum because they **spell out what a Product Owner expects** and what a team needs to accomplish.

There are no hairs to split and no points to argue. If it's in the acceptance criteria, then it **needs to be in the release**.

Effective SCRUM

What to do and what - not.



Be a Tragic SCRUM Participant

- Don't care about Scrum - it's only boring stand-ups.
- Don't care about what you do - someone will tell you eventually.
- Don't care about the product
- Be a lone wolf.
- Don't care about your teammates.
- F**k the effectiveness.
- Be passive.
- Stall your work.
- Take everything for granted.
- Micromanage everyone's else's work.
- Be irreplaceable.
- Don't improve - the process is sacred.

Be a Perfect SCRUM Participant

- Know exactly what Scrum is and is not.
- Know exactly what you should do and what you should not.
- Have a strong sense of responsibility and high self-esteem.
- Have good teamwork skills.
- Care for your teammates.
- Work as effectively as you can.
- Be active and proactive.
- Do not procrastinate.
- Doubt and ask.
- Self-organise.
- Be replaceable.
- Improve.

Dziękuję za uwagę