SCRUM MASTER PROFESSIONAL CERTIFICATE

SMPC® Version 012022

CertiProf®

Who is CertiProf®?

CertiProf® is a certifying entity founded in the United States in 2015, currently located in Sunrise, Florida.

Our philosophy is based on the creation of knowledge in community and for this its collaborative network is formed by:

- **Our Lifelong Learners (LLLs)** identify themselves as continuous learners, demonstrating their unwavering commitment to lifelong learning, which is vitally important in today's ever-changing and expanding digital world. Whether they pass the exam or not.
- Universities, training centers, and facilitators around the world are part of our network of allies **ATPs (Authorized Training Partners.)**
- **The authors (co-creators) a**re industry experts or practitioners who, with their knowledge, develop content for the creation of new certifications that respond to the industry needs.
- **Internal Staff:** Our distributed team with operations in India, Brazil, Colombia, and the United States is in charged of overcoming obstacles, finding solutions, and delivering exceptional results.

Our Accreditations and Affiliations

Memberships

itcc IT CERTIFICATION COUNCIL

Agile Alliance

ANSI MEMBER

Digital badges issued by

Credly by Pearson

Agile Alliance

CertiProf® is a corporate member of the Agile Alliance.

By joining the corporate Agile Alliance program, we continue to empower people by helping them reach their potential through education. Every day, we provide more tools and resources that allow our partners to train professionals who seek to improve their professional development and skills.

https://www.agilealliance.org/organizations/certiprof/

IT Certification Council - ITCC

CertiProf® is an active member of ITCC.

The fundamental purpose of the ITCC is to support industry and its member companies by marketing the value of certification, promoting exam safety, encouraging innovation, and establishing and sharing industry best practices.

Credly

This alliance allows people and companies certified or accredited with CertiProf® to have a worldwide distinction through a digital badge.

Credly is the most important badge issuer in the world and leading technology companies such as IBM, Microsoft, PMI, Nokia, Stanford University, among others, issue their badges with Credly.

Badge

https://www.credly.com/org/certiprof/badge/scrum-master-professional-certificate-smpc.1

Lifelong Learning

Holders of this particular badge have demonstrated their unwavering commitment to lifelong learning, which is vitally important in today's ever-changing and expanding digital world. It also identifies the qualities of an open, disciplined and constantly evolving mind, capable of using and contributing with its knowledge to the development of a more equal and better world.

Earning Criteria:

- Be a candidate for a CertiProf certification
- Be a continuous and focused learner
- Identify with the concept of lifelong learning
- Truly believe in and identify with the concept that knowledge and education can and should change the world
- Want to boost their professional growth

Source of this Material

This material is based on the Official Scrum Guide 2020 created by Ken Schwaber and Jeff Sutherland.

Objectives

- Understand the role of a Scrum Master based on the Scrum Guide™
- Understand the responsibilities of the Scrum Master
- Prepare to play the role of a Scrum Master in an organization that uses Scrum
- Understand the key terms and definitions to successfully pass the Scrum Master Professional Certificate SMPC® exam
- Achieve recognition with CertiProf® Professional Certification

Who should attend this certification workshop?

- Anyone who is interested in expanding their knowledge in the Scrum Master Role
- IT Leadership (Managers/Directors/VPs/CIOs/CTOs)
- Project Managers
- Product Owners
- Aspiring Scrum Masters
- Team Leaders

Prerequisites

- There are no formal requirements for this certification
- Certification code: SMPC®

Presentation

Welcome!
Report in the following format:

- Name
- Company
- Job title and experience
- Familiarity with Scrum concepts and practice
- Expectations of this course

SMPC® Exam

Certification exam:

- Format: Multiple selection
- Questions: 40
- Approval score: 32/40 or 80 %
- Duration: 60 minutes
- Open book: No
- Delivery: This exam is available online
- Supervised: it will be at the discretion of the coach/self-monitoring is available
- Two attempts included

Learning Goals

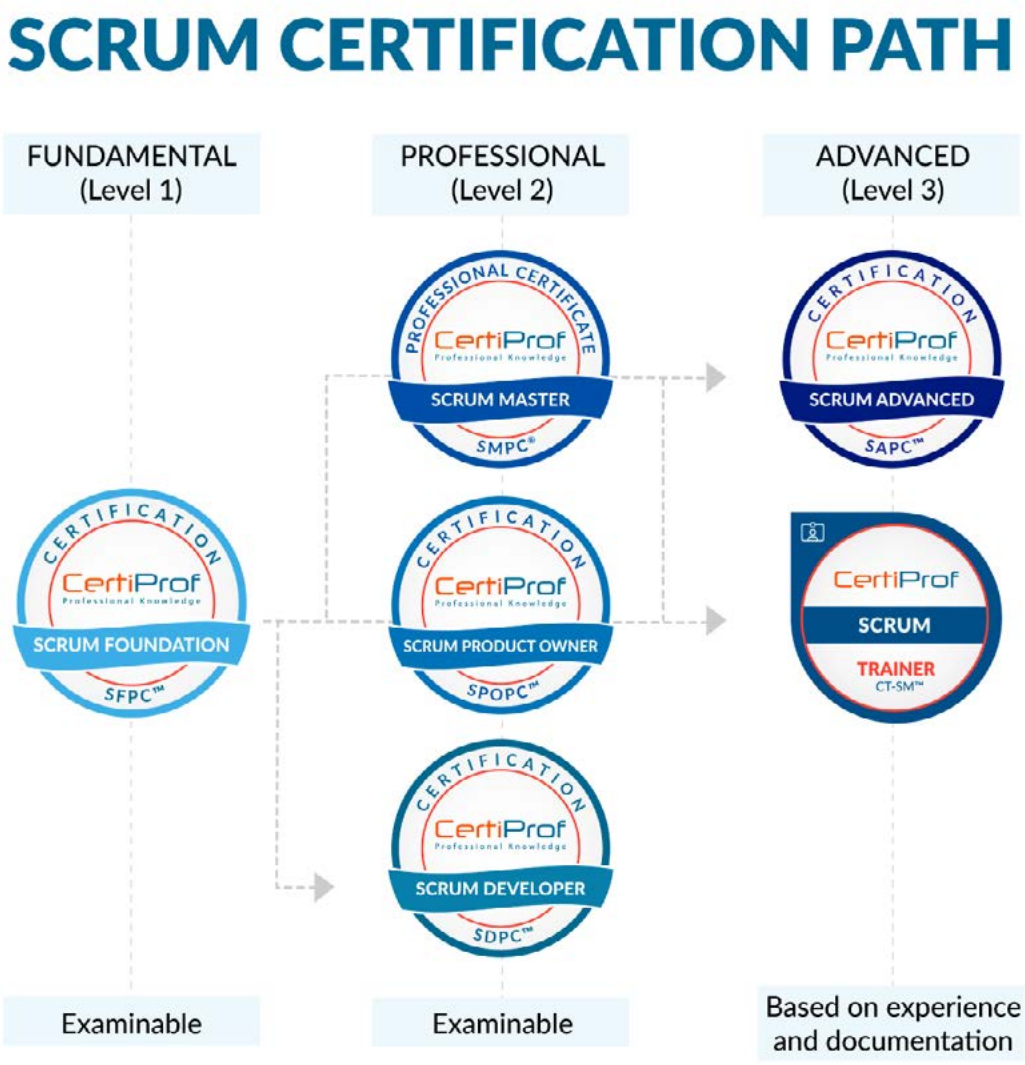
The learning objectives of this certification are based on:

- The 2020 Scrum Guide™, http://scrumguides.org
- Agile Manifesto, 4 values and 12 principles, http://www.agilemanifesto.org
- Agile Glossary, https://www.agilealliance.org/agile101/agile-glossary/
- Essential Scrum: A Practical Guide to the Most Popular Agile Process - Kenneth Rubin (Author)

1. Agile Introduction
2. What is Scrum
3. Scrum values
4. Scrum Team
5. Scrum Events
6. Scrum Artifacts
7. Advanced Scrum concepts
8. Act as Scrum Master

CertiProf Scrum Pathway

- Scrum Foundation SFPC™
- Scrum Master SMPC®
- Scrum Product Owner - SPOPC™
- Scrum Certified Trainer - S-CT™



Advanced Level will be earn using equivalent Scrum Master and Product Owner Certifications like CMS, PSM or SMC.

CertiProf®

CertiProf®
certiprof.com

SHARE AND VERIFY
YOUR LEARNING ACHIEVEMENTS EASILY

#SMPC #CertiProf

AGENDA

SCRUM MASTER PROFESSIONAL CERTIFICATE

Introduction

SMPC® Version 012022

CertiProf®

Introduction

Projects are affected by time constraints, cost, scope, quality, resources, organizational capabilities, and other limitations that make them difficult to plan, execute, manage, and finally succeed.

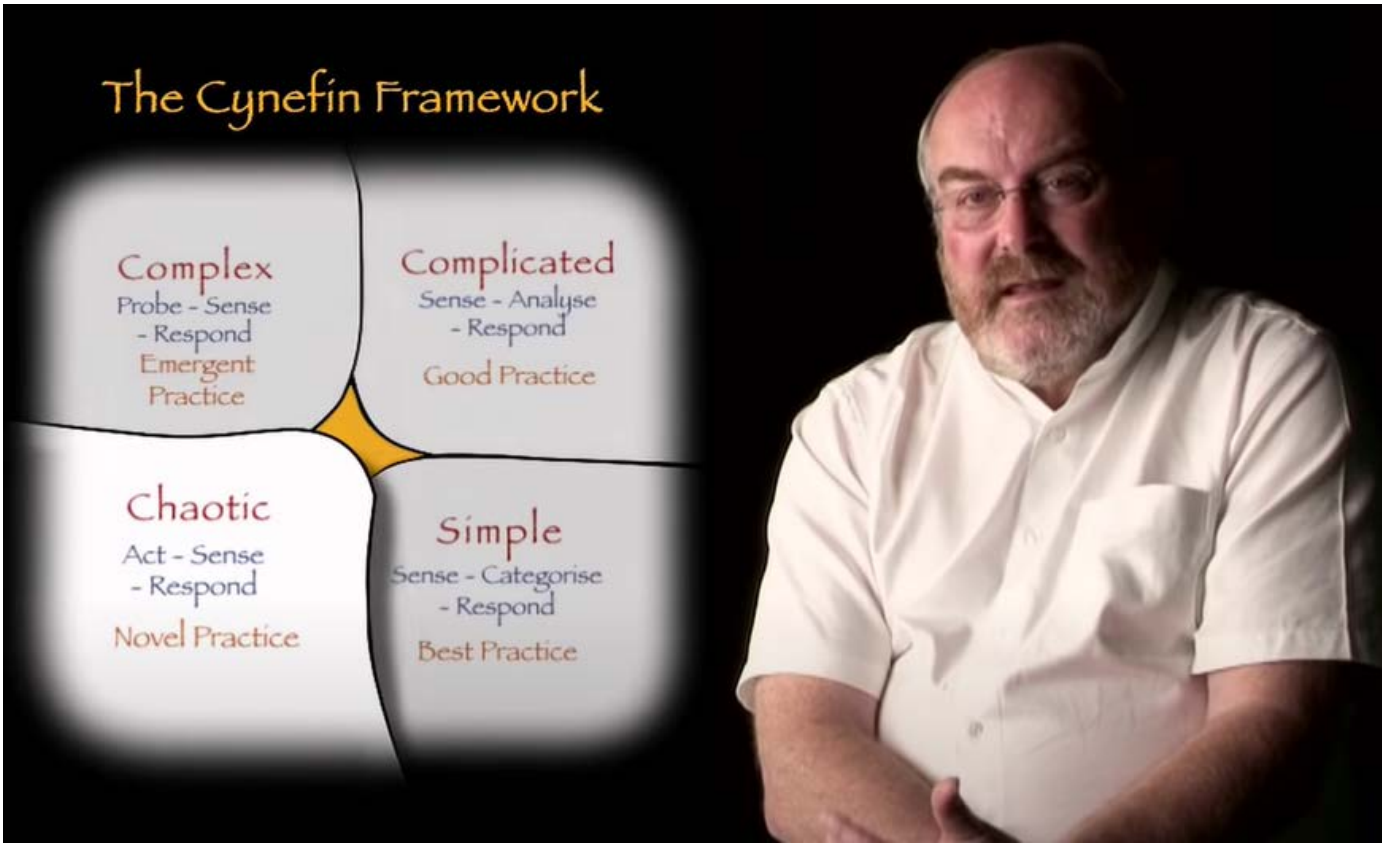
What is Agile?

Agile is the ability to create and respond to change. It is a way of dealing with, and ultimately succeeding in, an uncertain and turbulent environment.

The authors of the Agile Manifesto chose "Agile" as the label for this whole idea because that word represented the ability to adapt and the response to change that was so important to their approach.

Source: *https://www.agilealliance.org/agile101/agile-glossary/*

Cynefin Framework



Author: Dave Snowden

Based on https://www.youtube.com/watch?v=N7oz366X0-8

Agile Manifesto

The Agile manifesto emerged on February 17, 2001, when seventeen critics of software development met and coined the term "Agile Methodology" to define the methods that were emerging as an alternative to formal methodologies.

The Agile manifesto consists of 12 principles associated to 4 aspects or pillars.

Source: *https://www.agilealliance.org/manifesto-download/*

Aspects or Pillars of the Manifesto

- Individuals and their interaction, over processes and tools
- Working software, over the detailed documentation
- Customer collaboration, over contract negotiation
- Responding to change, over following a plan

Principles Behind the Agile Manifesto

The highest priority is to satisfy the customer through early and continuous delivery of useful software. Welcome changing to requirements, including late ones.

Frequently release a running software, from a couple of weeks to a couple of months, with preference for shorter periods.

Business leaders and developers should work together daily during the project.

Build projects around motivated individuals. Provide the environment and support they need, and trust that they will get the job done.

Direct conversation is the most efficient and effective method of transmitting information, both to and within the team.

Principles

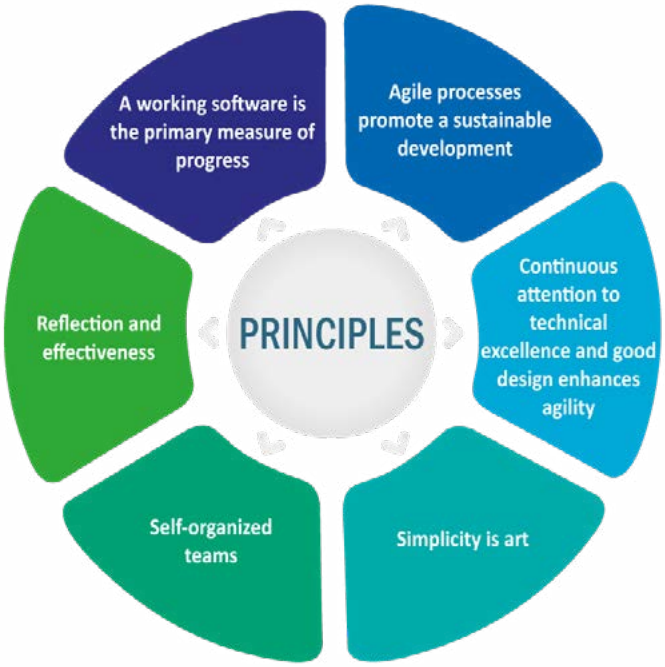
A working software is the primary measure of progress. Agile processes promote sustainable development.

Continuous attention to technical excellence and good design enhances agility.

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 about how to become more effective, then tunes and adjusts its behavior accordingly.



Declaration of Interdependence

Declaration of Interdependence in Project Management was written in early 2005 by a group of 15 project leaders as a supplement to the "Agile Manifesto."

It lists six management values needed to reinforce an agile development mindset, particularly in the management of complex and uncertain projects.

The 6 Values: Declaration of Interdependence

1. We increase return on investment by making continuous flow of value our focus
2. We deliver reliable results by engaging customers in frequent interactions and shared ownership
3. We expect uncertainty and manage for it through iterations, anticipation, and adaptation
4. We unleash creativity and innovation by recognizing that individuals are the ultimate source of value, and creating an environment where they can make a difference
5. We boost performance through group accountability for results and shared responsibility for team effectiveness
6. We improve effectiveness and reliability through situationally specific strategies, processes and practices"

http://pmdoi.org

[©2005 David Anderson, Sanjiv Augustine, Christopher Avery, Alistair Cockburn, Mike Cohn, Doug DeCarlo, Donna Fitzgerald, Jim Highsmith, Ole Jepsen, Lowell Lindstrom, Todd Little, Kent McDonald, Pollyanna Pixton, Preston Smith and Robert Wysocki.]

What is Agile?

Agile
A project management approach based on delivering requirements iteratively and incrementally throughout the life cycle.

Agile development
An umbrella term specifically for iterative software development methodologies. Popular methods include Scrum, Lean, DSDM and eXtreme Programming (XP).

Source: https://www.apm.org.uk/resources/find-a-resource/agile-project-management/glossary/

How should we see Agility?

In any type of management discipline, being agile is a quality, therefore, this should be a goal that should be achieved.

Agile project management especially implies adaptability during the creation of a product, service, or any other result.

Business Agility

Business Agility is an organization's ability to detect internally or externally changes and respond accordingly to deliver value to its customers.

Business agility is not a specific methodology or even a general framework. It is a description of how an organization operates by incorporating a specific type of growth mindset that is very similar to the agile mindset.

Business agility is appropriate for any organization facing uncertainty and rapid change.

Business agility adds values to:

- People and their interactions
- Collaboration
- Driving to the results
- Constant learning

Principles that serve the foundation of business agility include iterating to learn and reflect about feedback and adapt both the product and the process.

Source: https://www.agilealliance.org/glossary/business-agility

Why Agile Methodologies?

Agile Adoption Report 2021 by CertiProf

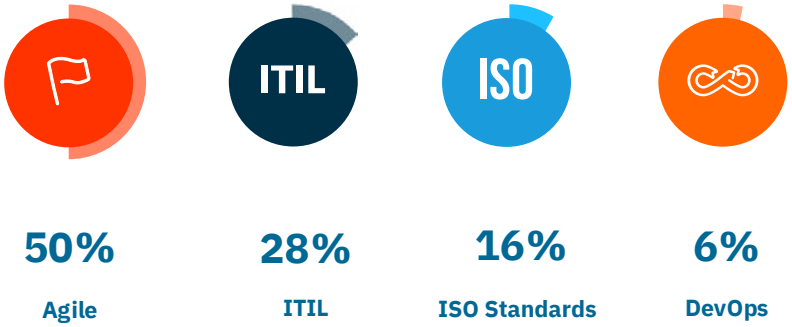
Download the agile report with the largest participation in the world and find out more about agile adoption in 2021.

- 70% of the companies surveyed are currently in an Agile transformation process
- The three mains reasons to adopt agile practices in the team or organization are expediting the delivery of products or services (14%), improving alignment between the business and IT department (12%), and increasing productivity (10%)

Source: Agile Adoption Report 2021
https://certiprof.com/pages/certiprof-agile-adoption-report-2021

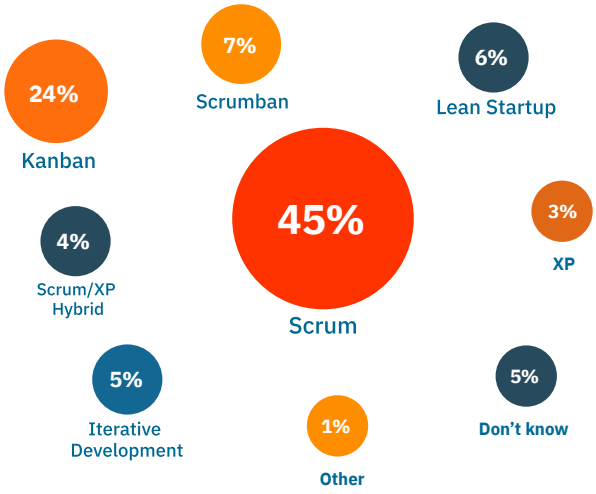
What approaches or methodologies do you primarily apply in your IT environment today?

MULTIPLE CHOICE QUESTION

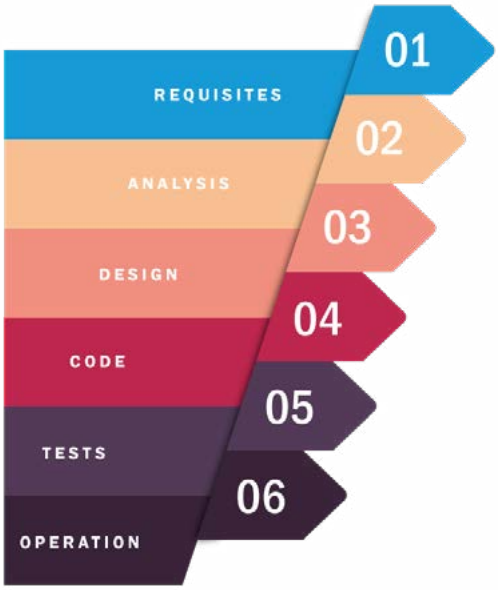


Which Agile Framework are you most related to?

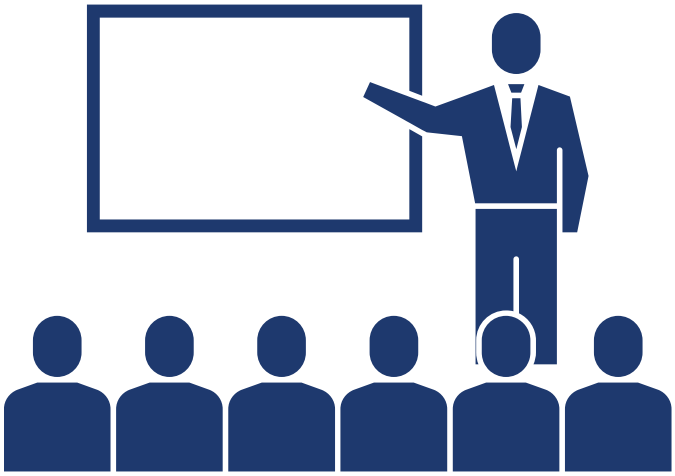
MULTIPLE CHOICE QUESTION



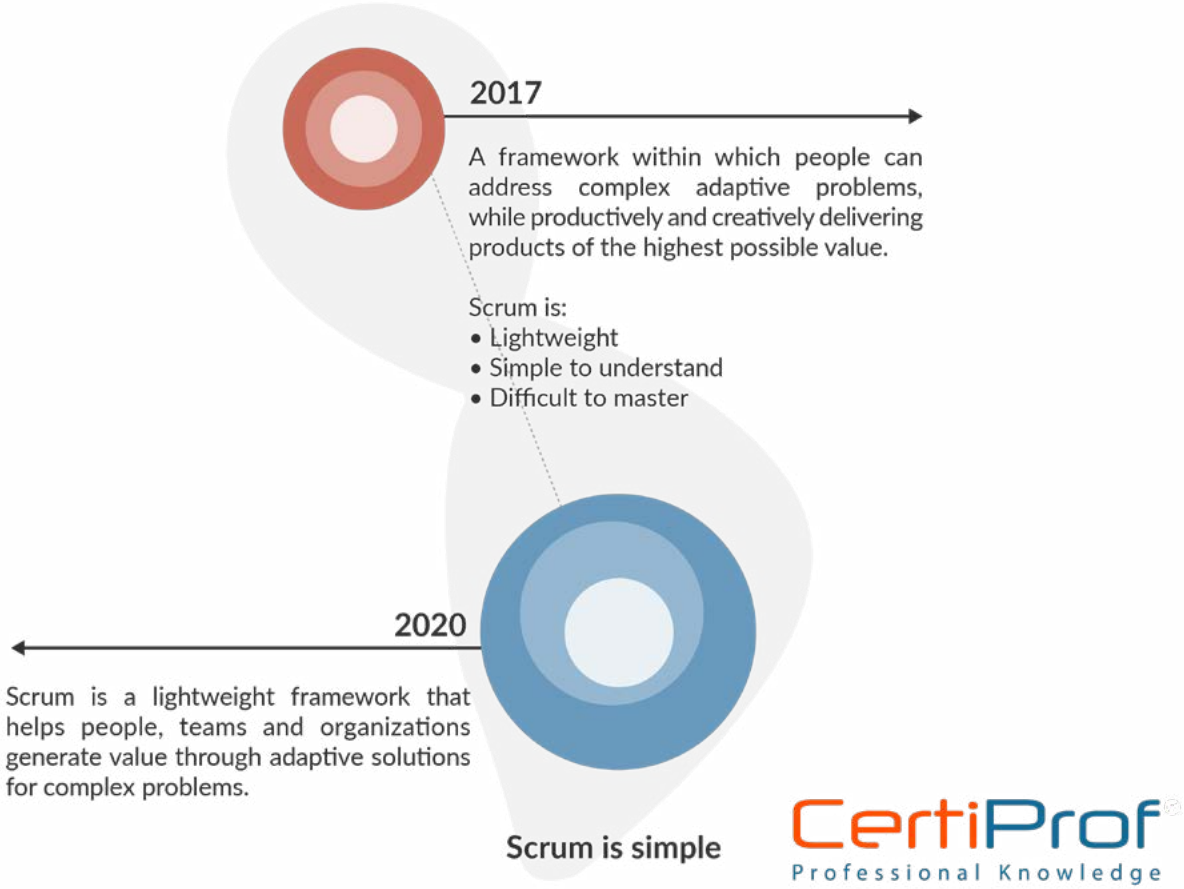
Traditional Project Management



Advantages: Logical order
Disadvantage: Assumes predictability



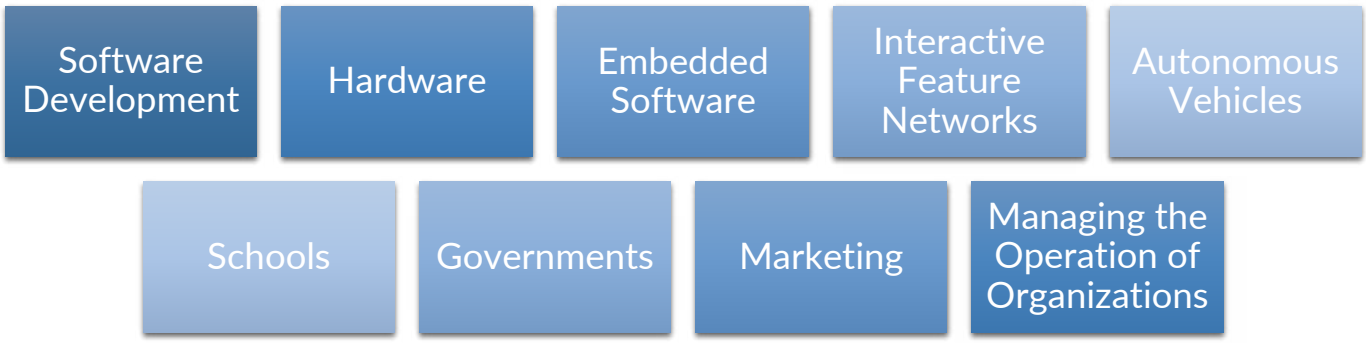
Definition of Scrum in Time



CertiProf®
Professional Knowledge

- Scrum was initially developed to manage and develop products
- It was developed in the early 1990s

Scrum is being adopted by different industries in several business models



Scrum proved especially effective in iterative and incremental knowledge transfer.
Scrum is now widely used for products, services, and management of the parent organization.

Definition of Scrum in the Guide (2020)

Scrum requires a Scrum Master to foster an environment where:

- A Product Owner sorts the work of a complex problem in a Product Backlog
- The Scrum Team converts a job selection into a Value Increment during a Sprint
- The Scrum Team and its stakeholders inspect the results and adapt for the next Sprint
- Repeat

Try it as is and determine if your philosophy, theory, and structure help you achieve goals and create value.

The Scrum framework is purposefully incomplete, only defining the parts required to implement Scrum theory.

Various processes, techniques and methods can be employed within the framework.

Scrum wraps around existing practices or renders them unnecessary.

Scrum makes visible the relative efficacy of current management, environment, and work techniques, so that improvements can be made.

- Scrum is free
- The Scrum framework is immutable
- While implementing only parts of Scrum is possible, the result is not Scrum
- Scrum exists only in its entirety and functions well as a container for other techniques, methodologies, and practices

About Scrum

The Scrum definition can be found in The Scrum Guide.

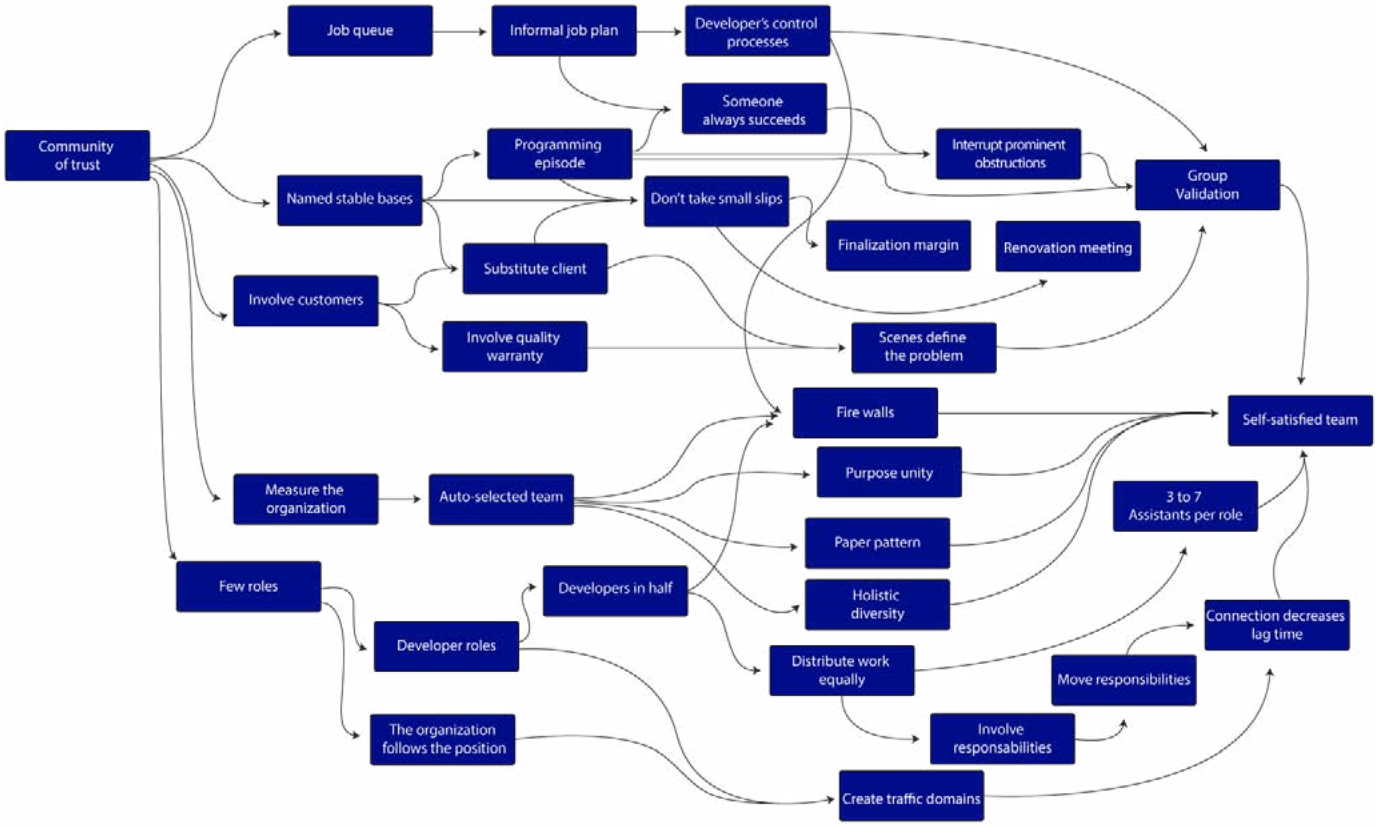
Changing the core design or ideas of Scrum, leaving out elements, or not following the rules of Scrum, covers up problems and limits the benefits of Scrum, potentially even rendering it useless.

As Scrum is being used, patterns, processes, and insights that fit the Scrum framework as described in this document, may be found, applied and devised.

Scrum Patterns

They provide guidance to Scrum Masters and professionals on where to focus to get the most value from improvements, but do not provide an instruction manual to continue without thinking.

Jim Coplien, co-author of Organizational Patterns of Agile Software Development



Source: http://scrumbook.org

SCRUM MASTER PROFESSIONAL CERTIFICATE

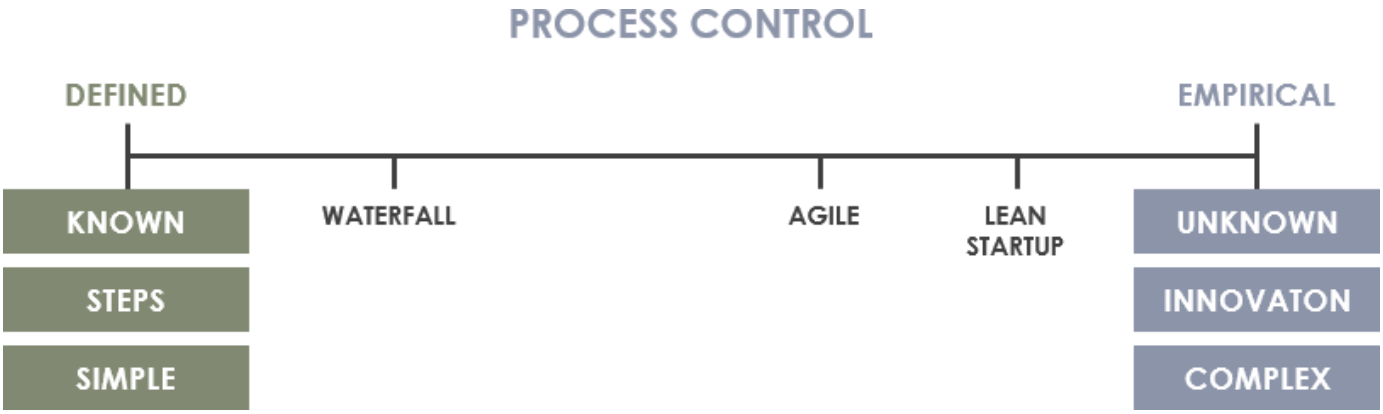
Scrum Theory

SMPC® Version 012022

CertiProf®

Empiricism

- Empiricism is based on taking decisions based on the concrete information obtained from the observation that shows the progress of product development, market changes and customer feedback
- Empiricism asserts that knowledge comes from experience and making decisions based on what is observed
- An empirical process is implemented in which progress is based on observation and experimentation rather than detail
- The opposite of empiricism is to use pre-planning, defined processes, predictive plans, non-concrete facts



Empirical Process Control

Empirical Process Control has the following characteristics:

- Learn as we go
- Wait and accept change
- Inspect and adapt using short development cycles
- Estimates are indicative only and may not be accurate

Scrum combines four formal events for inspection and adaptation.

These events work because they implement the empirical Scrum pillars of transparency, inspection, and adaptation.

Lean Thinking

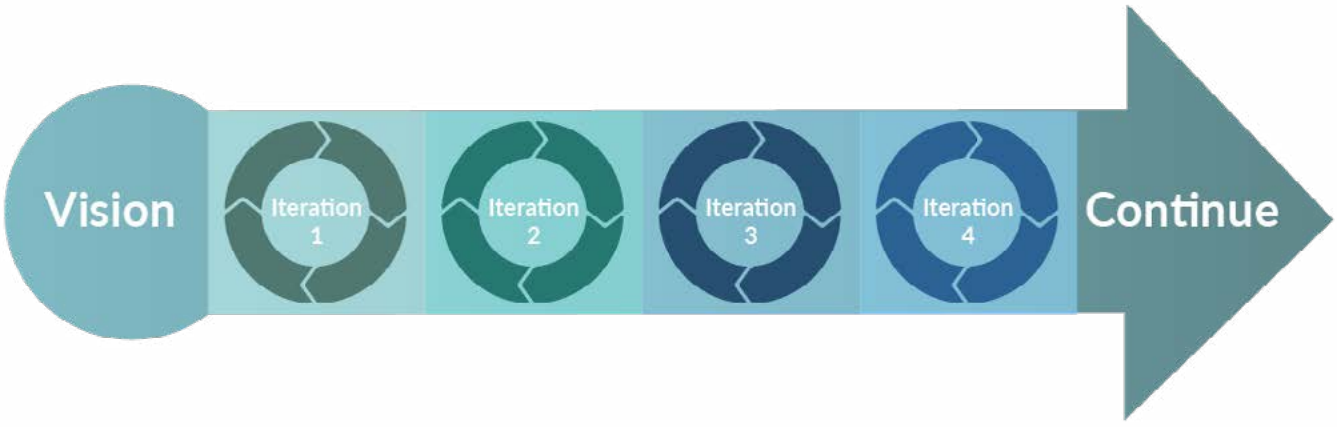
- Lean Thinking is a business methodology based on the history of Japanese manufacturing techniques that have been applied worldwide in many types of industries
- Lean focuses on providing high levels of value to the customer by continuously improving business processes
- Lean has its roots in the automotive manufacturing industry, particularly in the Toyota Production System. The Japanese company was able to create a sustainable ecosystem of work, where they are able to minimize their costs, ensure efficiency in their processes and sell their products at a competitive price
- Lean's two pillars provide the foundations needed to develop Lean Thinking. These are Continuous Improvement and Respect for People

5 Principles of Lean Thinking

1. Define Value
2. Map the Value Stream
3. Create Flow
4. Establish Pull
5. Pursue Perfection

Iterative

Scrum employs an iterative and Incremental approach to **optimize predictability and control risk.**



Three Pillars of Scrum

- Transparency
- Inspection
- Adaptation

Transparency

The emergent process and work must be visible to those performing the work as well as those receiving the work.

With Scrum, important decisions are based on the perceived state of its three formal artifacts.

Artifacts that have low transparency can lead to decisions that diminish value and increase risk.

Transparency enables inspection.

Inspection without transparency is misleading and wasteful.

Inspection

The Scrum artifacts and the progress toward agreed goals must be inspected frequently and diligently to detect potentially undesirable variances or problems.

To help with inspection, Scrum provides cadence in the form of its five events.

Inspection enables adaptation. Inspection without adaptation is considered pointless.

Scrum events are designed to provoke change.

Adaptation

If any aspects of a process deviate outside acceptable limits or if the resulting product is unacceptable, the process being applied, or the materials being produced must be adjusted.

The adjustment must be made as soon as possible to minimize further deviation.

Adaptation becomes more difficult when the people involved are not empowered or self-managing.

A Scrum Team is expected to adapt the moment it learns anything new through inspection.

SCRUM MASTER PROFESSIONAL CERTIFICATE

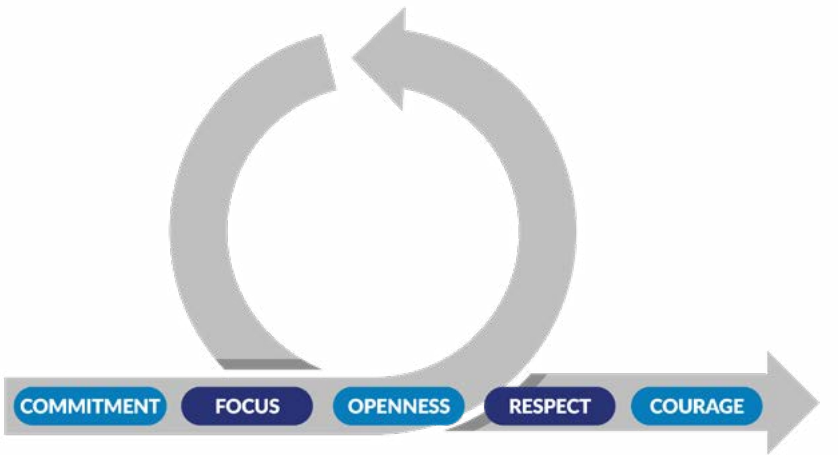
Scrum Values

SMPC® Version 012022

CertiProf®

Scrum Values

Successful use of Scrum depends on people becoming more proficient in living five values:



- **Commitment**

In the result in achieving the goals.

- **Focus**

In the Sprint, in the Product goal.
Targeting is essential for getting something meaningful done.

- **Openness**

Transparency and openness is required when making organization work, progress, learn, and identify problems.

- **Respect**

Scrum team members show respect to each other, respect each other's ideas, give permission to have a bad day from time to time, and recognize each other's achievements.

- **Courage**

It's critical for a team's success.
Do the right things. Work through the problems.
Constantly improving.

Commitment

Scrum's team is **committed** to achieving their goals and **supporting** each other.

Focus

Their primary focus is on the work of the Sprint to make the best possible progress toward these goals.

Openness

The Scrum Team and its stakeholders are open about the work and the challenges.

Respect

Scrum Team members respect each other to be capable, independent people, and are respected as such by the people with whom they work.

Courage

Scrum team members have the courage to **do the right thing** and work on complex problems.

Scrum Values

Values **give direction** to the Team. Guide the Team.

The decisions that are made, the steps taken, and the way Scrum is used should reinforce these values, not diminish or undermine them.

Scrum Team members **learn and explore** values as they work with Scrum events and artifacts.

When these values are embodied by the Scrum Team and the people they work with, the empirical Scrum pillars of transparency, inspection, and adaptation come to life building trust.

SCRUM MASTER PROFESSIONAL CERTIFICATE

Scrum Team

SMPC® Version 012022

CertiProf®

Scrum Team

The fundamental unit of Scrum is a small team of people, a Scrum Team.

The Scrum Team consists of one Scrum Master, one Product Owner, and Developers. Within a Scrum Team, there are no sub-teams or hierarchies.

It is a cohesive unit of professionals focused on one objective at a time, the Product Goal.

Scrum Teams are cross-functional, meaning the members have all the skills necessary to create value each Sprint.

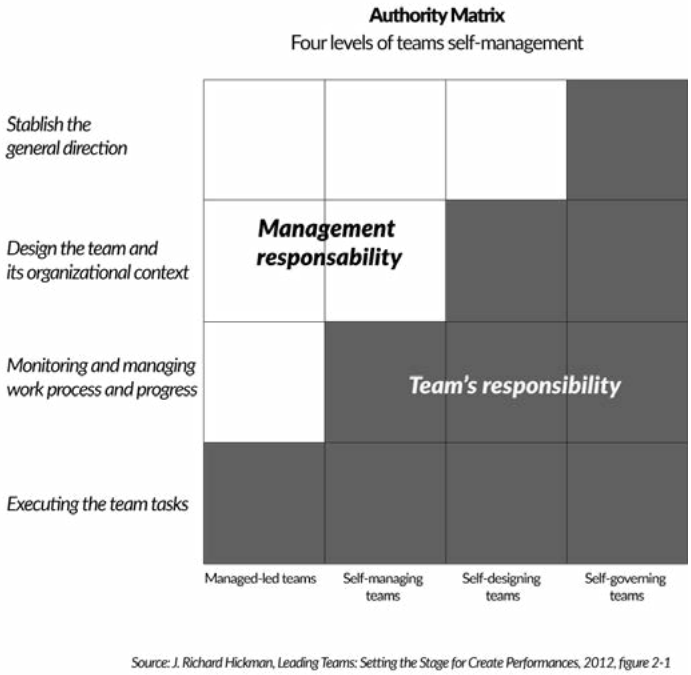
They are also self-managing, meaning they internally decide who does what, when, and how.

Self-managed Over Self-organized

Self-organized teams choose the best way to do their work, rather than being led by others outside the team. - Scrum guide 2017.

Self-managed, which means they internally decide who does what, when, and how.

Traditional, self-managing and self- designing/ organising teams, self-governing (Hackman, The design of work teams, 1987, p. 334).



Source: J. Richard Hickman, Leading Teams: Setting the Stage for Create Performances, 2012, figure 2-1

Scrum Team

The Scrum Team is small enough to remain nimble and large enough to complete significant work within a Sprint, typically 10 or fewer people.

Overall, we've found that smaller teams **communicate better and are more productive.**

- Too large Scrum Teams should consider **reorganizing into multiple cohesive Scrum Teams,** each focused on the same product
- Multiple Scrum Teams **must share the same Product Objective,** Product Backlog, and Product Owner

Scrum Team is responsible for all product-related activities:

- Collaboration
- Verification
- Maintenance
- Operation
- Experimentation
- Research and development
- Anything else that might be required

Structured and empowered by the organization to manage their own work.
Working in Sprints at a sustainable pace improves the Scrum Team's focus and consistency.
The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint.

Scrum defines three specific accountabilities within the Scrum Team:

- Developers
- Product Owner
- Scrum Master

Developers

Developers are the people in the Scrum Team that are committed to creating any aspect of a usable Increment each Sprint.

Developer Skills

The specific skills needed by the Developers are often broad and will vary with the domain of work.

Developer Accountability

- Creating a plan for the Sprint, the Sprint Backlog
- Instilling quality by adhering to a Definition of Done
- Adapting their plan each day toward the Sprint Goal
- Holding each other accountable as professionals

Agile Teams Features

Product Owner

- Product Owner (PO) represents the customer's voice, and is responsible for maximizing the value of the product
- A PO should always maintain the vision of stakeholders.
- He/She must understand and support the needs and interests of all Stakeholders
- Governs and maintains the Release Planning

Features of Product Owner

The Product Owner **is not a committee,** it is a person.

Product Owner´s Responsibilities

- Is accountable for maximizing the value of the product
- Effective management of The Product Backlog
  - Product Owner can delegate
  - Product Owner remains accountable even if he/she delegates

Effective Product Backlog management including:

- Developing and explicitly communicating the Product Goal
- Creating and clearly communicating Product Backlog items
- Ordering Product Backlog items
- Ensuring that the Product Backlog is transparent, visible and understood

The Product Owner may represent the needs of many stakeholders in the Product Backlog.

Adjusting the content or order of the Product Backlog requires convincing (negotiating with criteria) with the Product Owner.

For Product Owners to be successful, the entire organization **must respect their decisions.**

These decisions are visible in the content and ordering of the Product Backlog, and through the inspectable Increment at the Sprint Review.

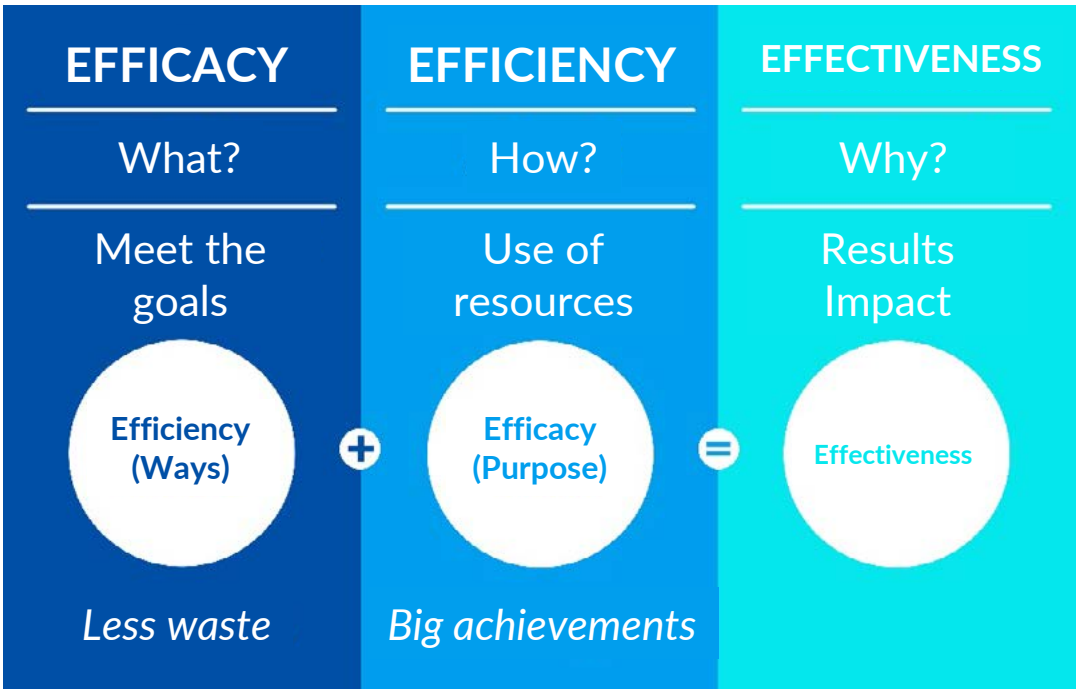
Scrum Master

The Scrum Master is accountable for establishing Scrum as defined in the Scrum Guide.

Scrum Master **helps everyone understand Scrum's theory and practice**, both within the Scrum Team and the organization.

The Scrum Master is accountable for the Scrum Team's effectiveness.

They do this by enabling the Scrum Team to improve its practices, within the Scrum framework.



Scrum Masters **are true leaders** who serve the Scrum Team and the larger organization.

Scrum Master **serves the Scrum Team** in several ways:

- Coaching the team members in self-management and cross-functionality
- Helping the Scrum Team focus on creating high-value Increments that meet the Definition of Done
- Causing the removal of impediments to the Scrum Team's progress
- Ensuring that all Scrum events take place and are positive, productive, and kept within the timebox

Scrum Master **serves the Product Owner** in several ways:

- Helping find techniques for effective Product Goal definition and Product Backlog management
- Helping the Scrum Team understand the need for clear and concise Product Backlog items
- Helping establish empirical product planning for a complex environment
- Facilitating stakeholder collaboration as requested or needed

Scrum Master **serves the organization** in several ways:

- Leading, training, and coaching the organization in its Scrum adoption
- Planning and advising Scrum implementations within the organization
- Helping employees and stakeholders understand and enact an empirical approach for complex work
- Removing barriers between stakeholders and Scrum Teams

Stakeholders

A person, group, or organization that affects or may be affected by an organization's actions.

SCRUM MASTER PROFESSIONAL CERTIFICATE

Scrum Events

SMPC® Version 012022

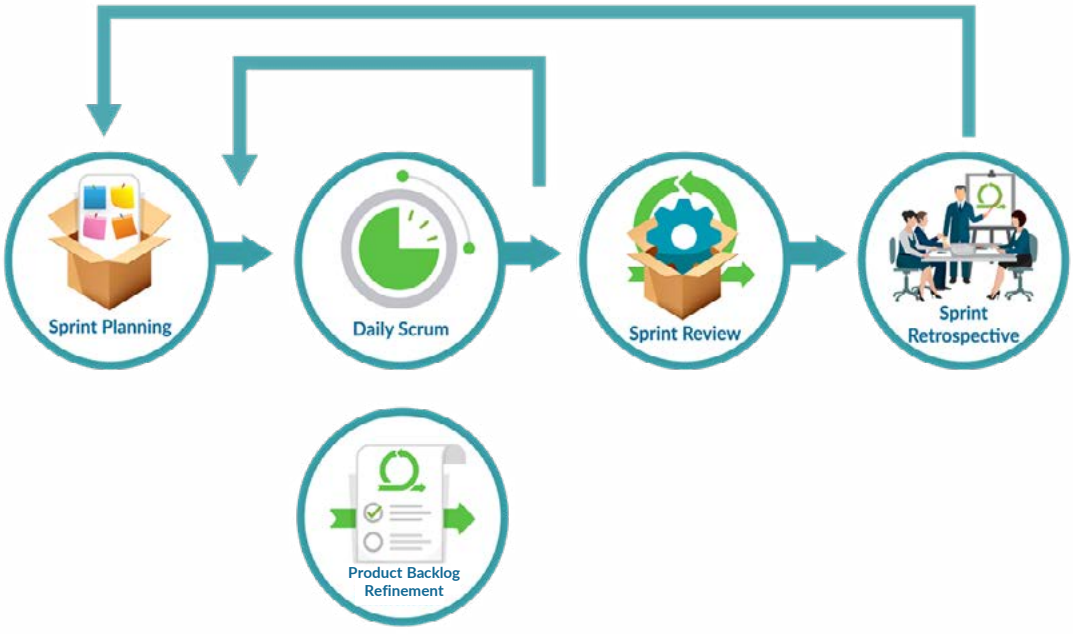
CertiProf®

Scrum Events

- The Sprints
- Sprint Planning
- Daily Scrum
- Sprint Review
- Sprint Retrospective

The Sprint

The Sprint i**s a container** for all events.



Scrum Events

Every event in Scrum **is a formal opportunity to inspect and adapt Scrum artifacts.**

These events are specifically designed to enable the transparency required.

Failure to operate any events as prescribed results in lost opportunities to inspect and adapt.

Scrum's Three Pillars

Events are used in Scrum to **create regularity and minimize the need for meetings not defined** in Scrum.

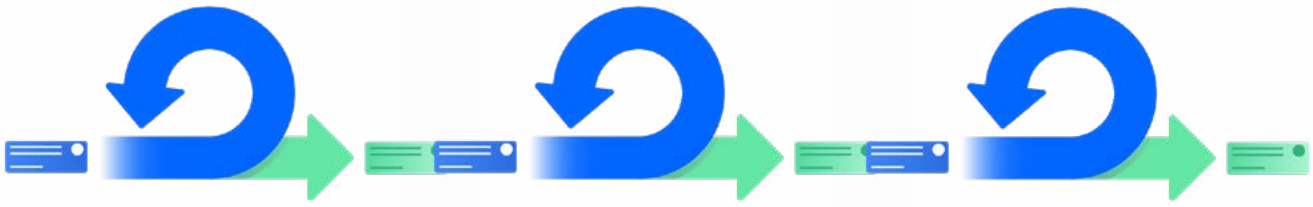
All events are held at the same time and place to reduce **complexity.**

The Sprint

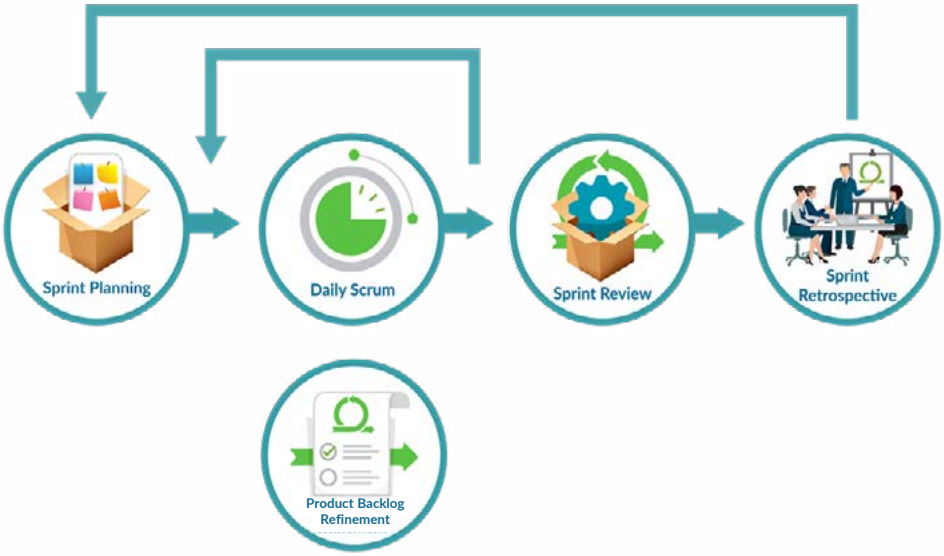
Sprints are the heartbeat of Scrum, where ideas are turned into value.

They are fixed length events of one month or less to create consistency.

A new Sprint **starts immediately** after the conclusion of the previous Sprint.



All the work necessary to achieve the Product Goal, including Sprint Planning, Daily Scrums, Sprint Review, and Sprint Retrospective, happen within Sprints.



During the Sprint:

- No changes are made that would endanger the Sprint Goal
- Quality does not decrease
- The Product Backlog is refined as needed
- Scope may be clarified and renegotiated with the Product Owner as more is learned

Sprints enable **predictability** by ensuring the inspection and adaptation of progress towards a Product Goal at least every calendar month.

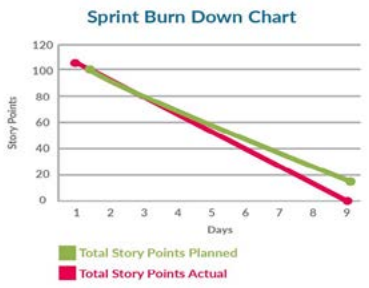
Scrum's Three Pillars

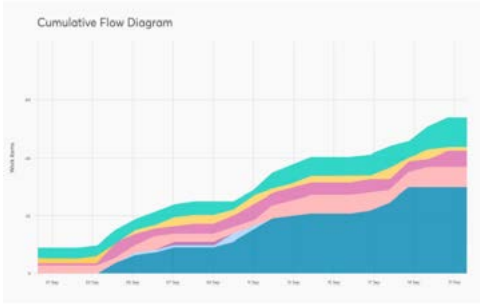
When a Sprint's horizon is too long, the Sprint Goal may become invalid, complexity may rise, and risk may increase.

Shorter Sprints can be employed to generate more learning cycles and limit risk of cost and effort to a smaller time frame.

Each Sprint may be considered a short project.

Various practices exist to forecast progress, like burn-downs, burn-ups, or cumulative flows.





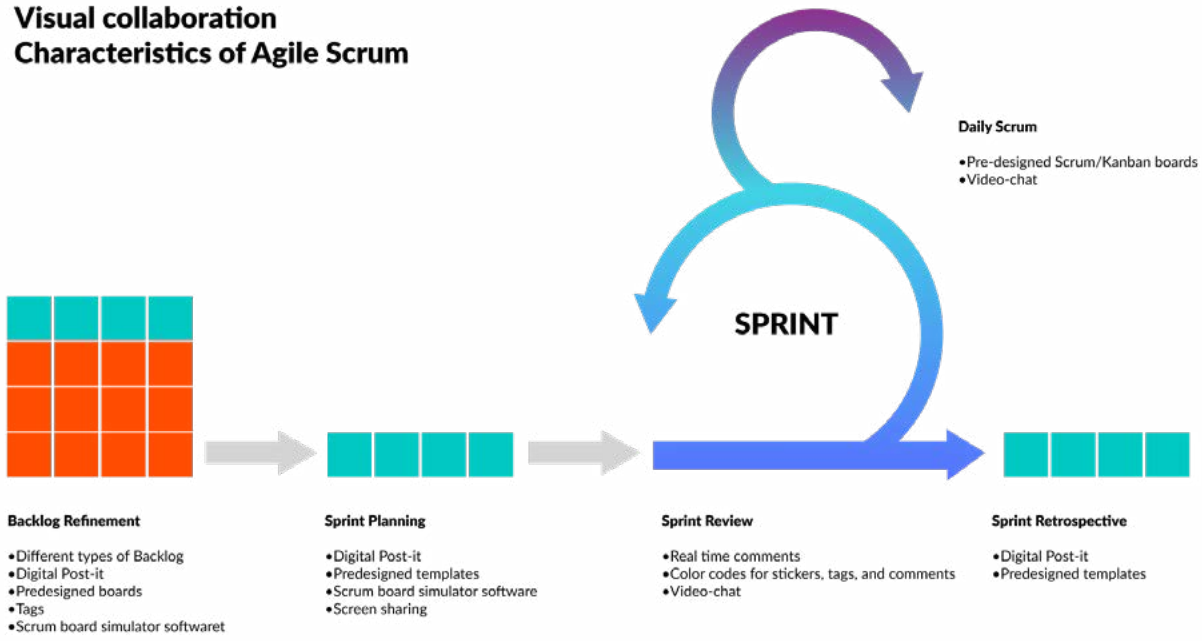
While proven useful, these do not replace the importance of empiricism. In complex environments, what will happen is unknown. Only what has already happened may be used for forward-looking decision making.

A Sprint could be cancelled if the Sprint Goal becomes obsolete.

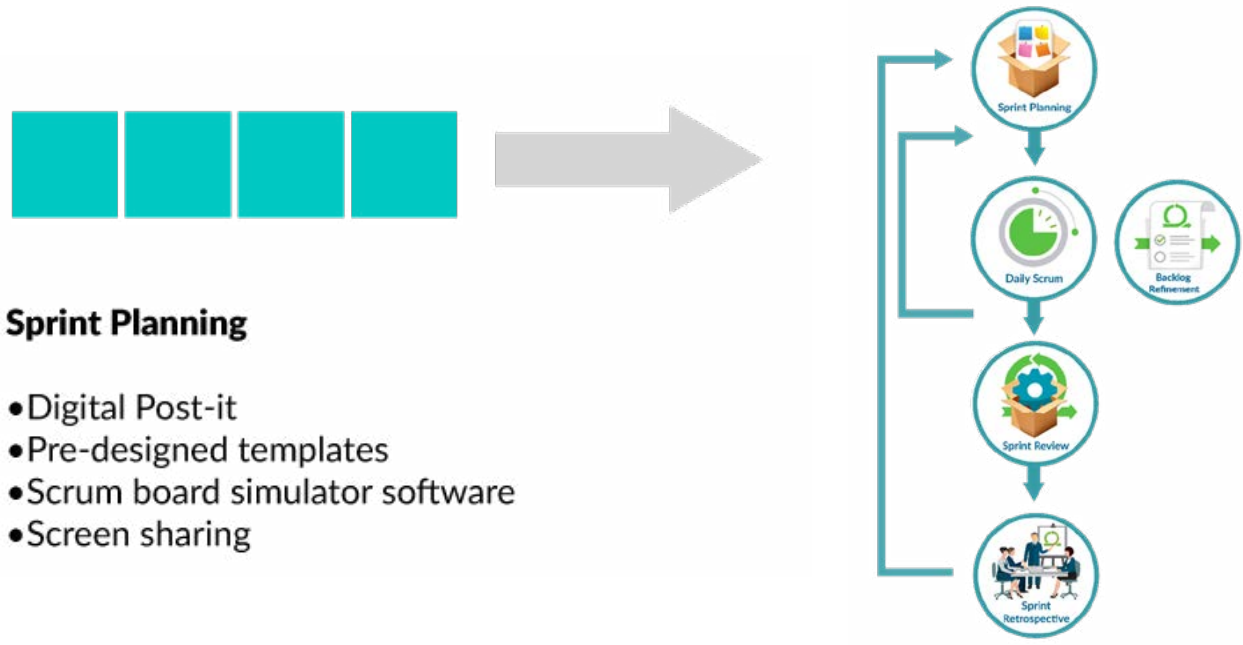
Only the Product Owner has the authority to cancel the Sprint.

Sprint Planning

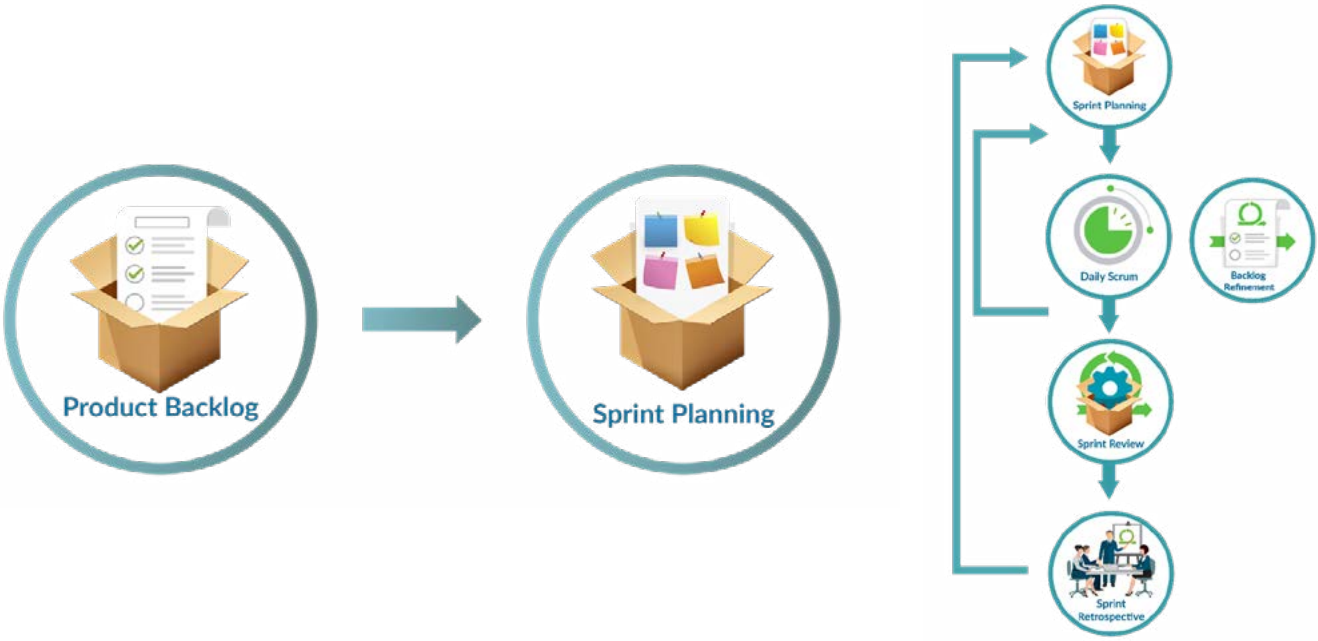
Sprint Planning initiates the Sprint by laying out the work to be performed for the Sprint. Scrum applies the Pull principle in a Sprint planning.



This resulting plan is created by the collaborative work of the entire Scrum Team.



The Product Owner ensures that attendees are prepared to discuss the most important Product Backlog items and how they map to the Product Goal.



The Scrum Team may also invite other people to attend Sprint Planning to provide advice.

Sprint planning addresses the following topics:

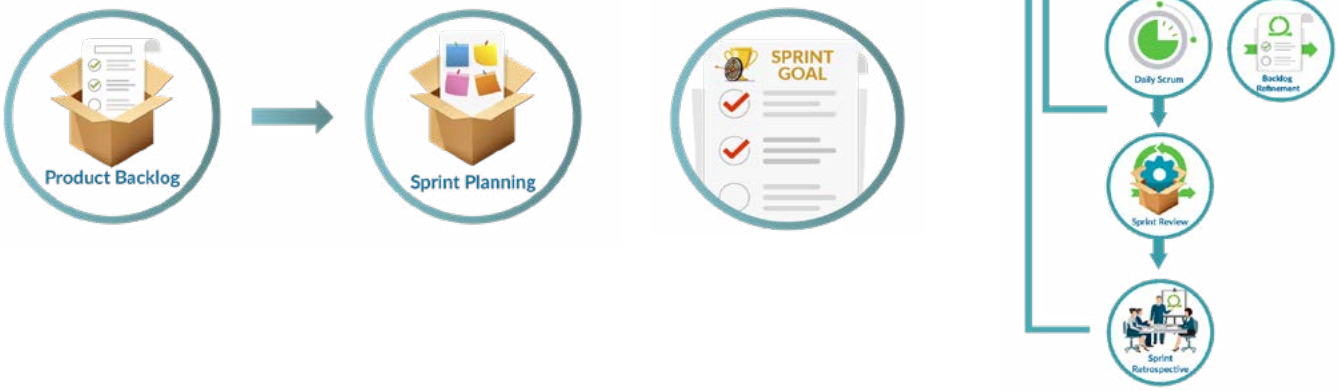
Topic One: Why is this Sprint valuable?

Topic Two: What can be done this Sprint?

Topic Three: How will the chosen work get done?

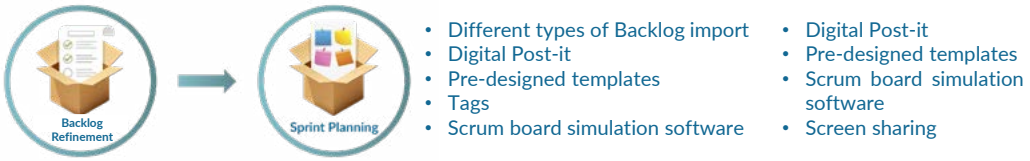
Topic One: Why is this Sprint **valuable?**

- The Product Owner proposes how the product could increase its value and utility in the current Sprint
- The whole Scrum Team then collaborates to define a Sprint Goal that communicates why the Sprint is valuable to stakeholders
- The Sprint Goal must be finalized prior to the end of Sprint Planning



Topic two: What can be done in this Sprint?

- Through discussion with the Product Owner, the Developers select items from the Product Backlog to include in the current Sprint
- The Scrum Team may refine these items during this process, which increases understanding and confidence
- Selecting how much can be completed within a Sprint may be challenging
- However, the more the Developers know about their past performance, their upcoming capacity, and their Definition of Done, the more confident they will be in their Sprint forecasts

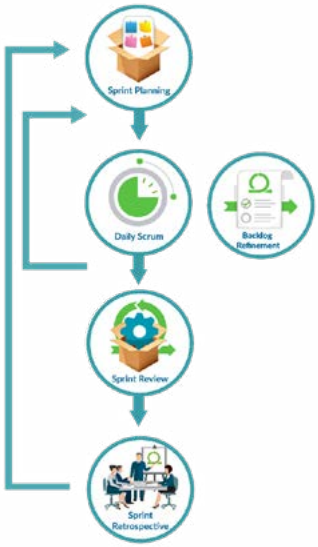


Backlog refinement

- Different types of Backlog import
- Digital Post-it
- Pre-designed templates
- Tags
- Scrum board simulation software

Sprint planning

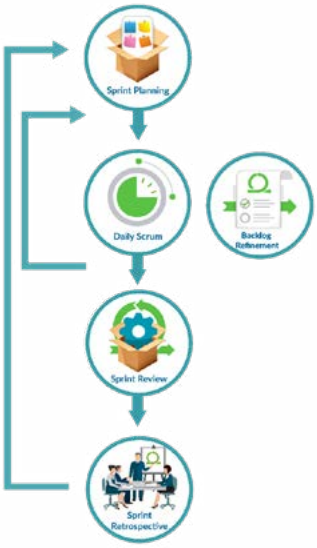
- Digital Post-it
- Pre-designed templates
- Scrum board simulation software
- Screen sharing



Source: https://miro.com/blog/resources/visual-collaboration-agile-development-guide/product-backlog/

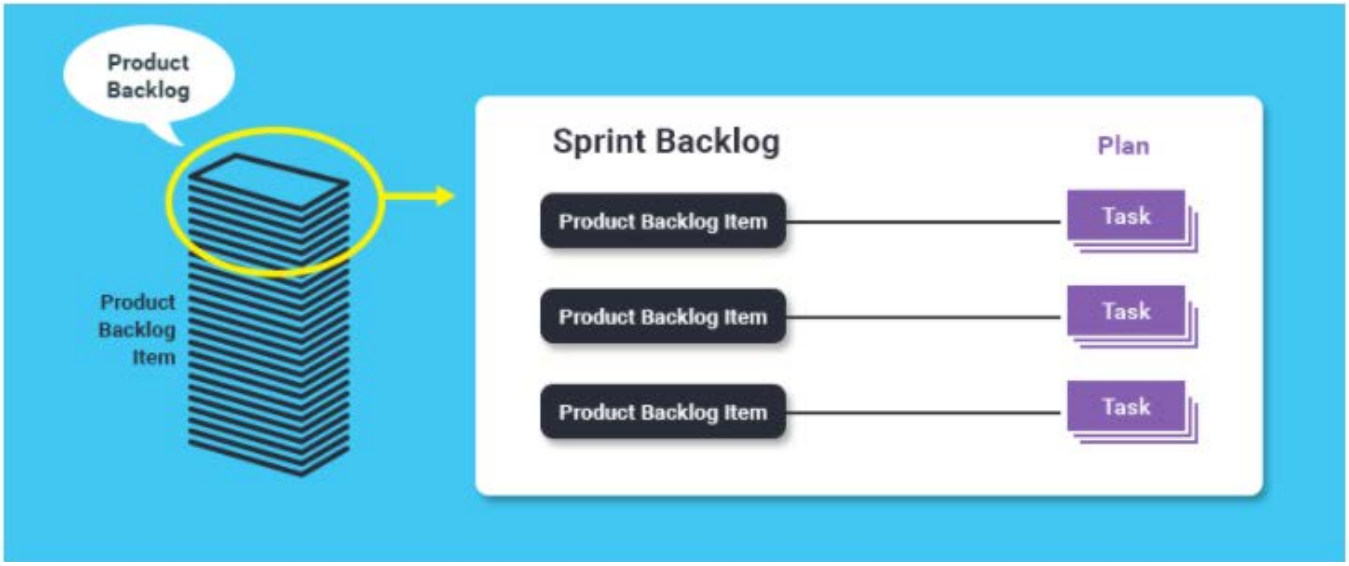
Topic Three: How will the chosen work get done?

- For each selected Product Backlog item, the Developers plan the work necessary to create an Increment that meets the Definition of Done
- This is often done by decomposing Product Backlog items into smaller work items of one day or less. How this is done is at the sole discretion of the Developers
- No one else tells them how to turn Product Backlog items into Increments of value



Sprint Backlog

The Sprint Goal, the Product Backlog items selected for the Sprint, plus the plan for delivering them are together referred to as the Sprint Backlog.



Sprint Planning is timeboxed to a maximum of eight hours for a one-month Sprint.

For shorter Sprints, the event is usually shorter.

Daily Scrum

The purpose of the Daily Scrum is to inspect progress toward the Sprint Goal and adapt the Sprint Backlog as necessary, adjusting the upcoming planned work.

The Daily Scrum is a 15-minute event for the Developers of the Scrum Team.

The Daily Scrum isn't the only time developers can adjust their plan.

They often meet throughout the day to discuss in more detail about adapting or re-planning the rest of the Sprint's work.

Scrum's Three Pillars

To reduce complexity, it is held at the same time and place every working day of the Sprint.

How to Run Remote Daily Scrum Meeting Effectively?

If the Product Owner or Scrum Master are actively working on items in the Sprint Backlog, they participate as Developers.

The Scrum Master teaches the Developers to keep the Daily Scrum within the established timebox.

The Developers can select whatever structure and techniques they want, as long as their Daily Scrum focuses on progress toward the Sprint Goal and produces an actionable plan for the next day of work.

This creates focus and improves self-management.

Daily Scrums improve communications, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings.

The Daily Scrum is not the only time Developers are allowed to adjust their plan. They often meet throughout the day for more detailed discussions about adapting or re-planning the rest of the Sprint's work.

Additional Aspects – Daily Scrum

- The team meets to communicate and understand the states
- Essential to know continuous progress and avoid blockage
- It's not intended to report progress

Sprint Review

The purpose of the Sprint Review is to inspect the outcome of the Sprint and determine future adaptations.

The Scrum Team presents the results of their work to key stakeholders and progress toward the Product Goal is discussed.

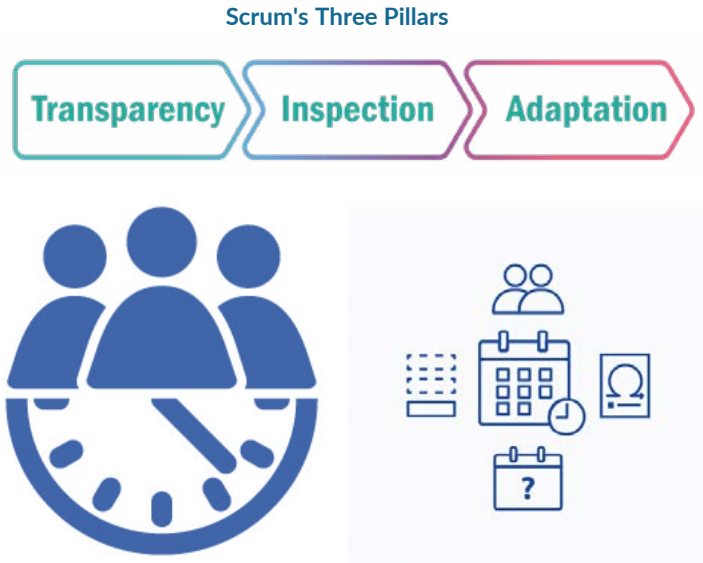
The Scrum Team and stakeholders review what was accomplished in the Sprint and what has changed in their environment.

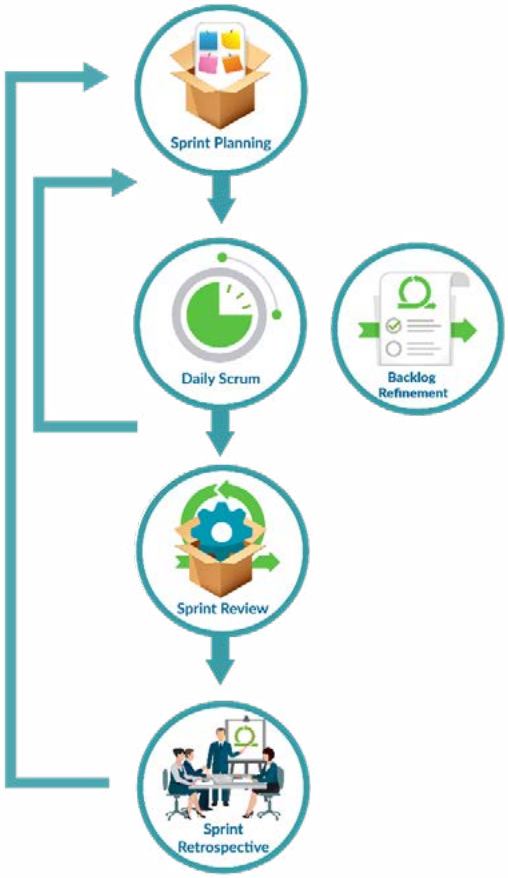
The Product Backlog may also be adjusted to meet new opportunities.

The Sprint Review is a working session and the Scrum Team should avoid limiting it to a presentation.

The Sprint Review is the second to last event of the Sprint and is timeboxed to a maximum of four hours for a one-month Sprint.

For shorter Sprints, the event is usually shorter in duration.





Sprint Retrospective

The purpose of the Sprint Retrospective is to plan ways to increase quality and effectiveness.

The Scrum Team inspects how the last Sprint went with regards to individuals, interactions, processes, tools, and their Definition of Done.

Inspected elements often vary with the domain of work.

Assumptions that led them astray are identified and their origins explored.

The Scrum Team discusses what went well during the Sprint, what problems it encountered, and how those problems were (or were not) solved.

The Scrum Team identifies the most helpful changes to improve its effectiveness.

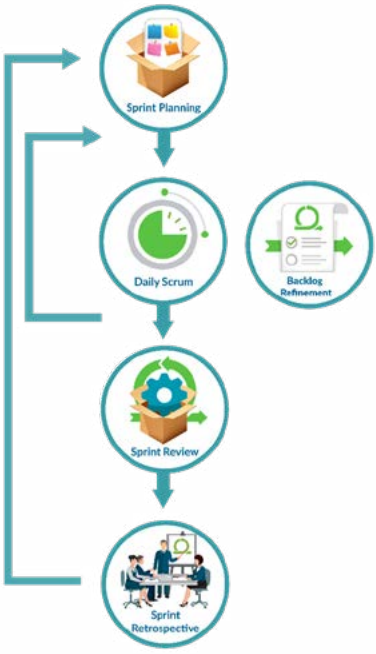
The most impactful improvements are addressed as soon as possible.

They may even be added to the Sprint Backlog for the next Sprint.

The Sprint Retrospective concludes the Sprint.

It is timeboxed to a maximum of three hours for a one-month Sprint.

For shorter Sprints, the event is usually shorter in duration.

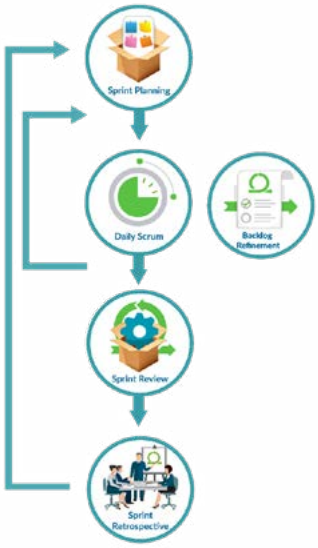


Techniques for Driving a Retrospective

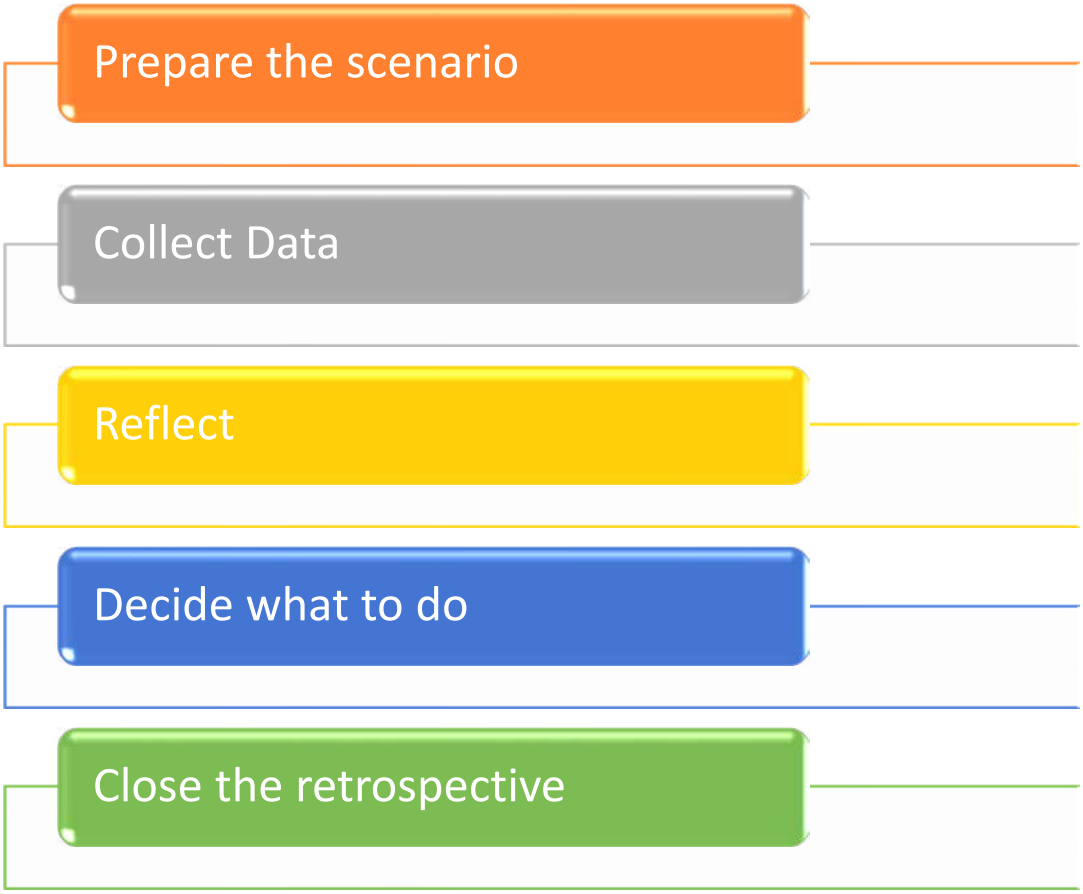
- The sailboat
- The 4L Technique
- The Starfish
- Mad-Sad-Glad
- Start-Stops-Continue

Recommended:
https://www.mural.co/templates/retrospective

https://www.smartsheet.com/content/retrospective-templates



The 5 Stages of a Retrospective



SCRUM MASTER PROFESSIONAL CERTIFICATE

Scrum Artifacts

SMPC® Version 012022

CertiProf®

Scrum Artifacts

- Scrum's artifacts represent work or value
- They are designed to maximize transparency of key information
- Thus, everyone inspecting them has the same basis for adaptation

Scrum's Three Pillars

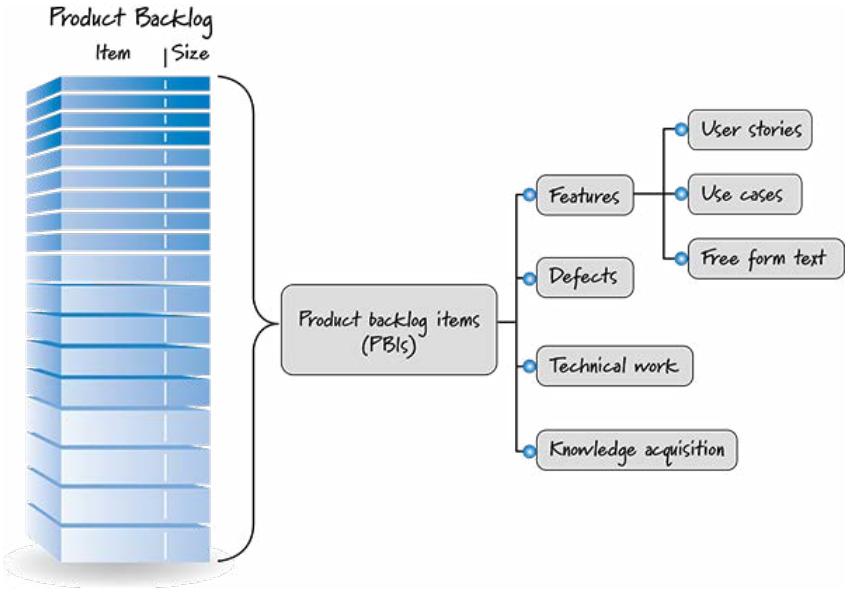
Each artifact contains a commitment to ensure it provides information that enhances transparency and focus against which progress can be measured:

- For the Product Backlog it is the Product Goal
- For the Sprint Backlog it is the Sprint Goal
- For the Increment it is the Definition of Done

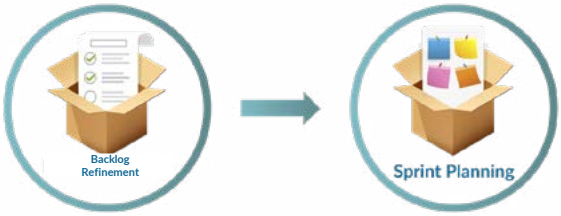
These commitments exist to reinforce empiricism and the Scrum values for the Scrum Team and their stakeholders.

Product Backlog

The Product Backlog is an emergent, ordered list of what is needed to improve the product.
It is the single source of work undertaken by the Scrum Team.



Product Backlog items that can be Done by the Scrum Team within one Sprint are deemed ready for selection in a Sprint Planning event.



Backlog refinement

- Different types of Backlog import
- Digital Post-it
- Pre-designed templates
- Tags
- Scrum board simulation software

Sprint Planning

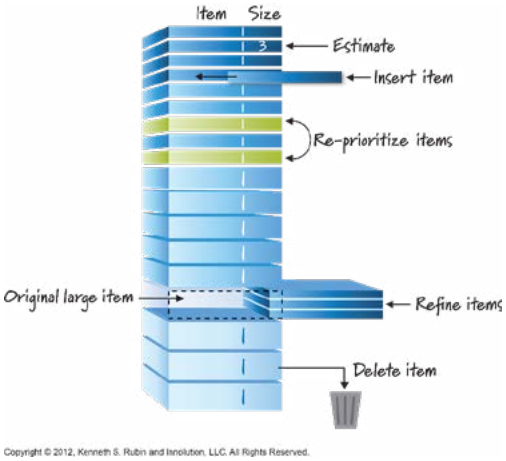
- Digital Post-it
- Pre-designed templates
- Scrum board simulation software
- Screen sharing

They usually acquire this degree of transparency after refining activities.

Product Backlog refinement is the act of breaking down and further defining Product Backlog items into smaller more precise items.

This is an ongoing activity to add details, such as a description, order, and size.

Attributes often vary with the domain of work.



The Developers who will be doing the work are responsible for the sizing.

The Product Owner may influence the Developers by helping them understand and select trade-offs. (best alternatives).

Commitment: Product Goal

The Product Goal describes a future state of the product which can serve as a target for the Scrum Team to plan against.

The Product Goal is in the Product Backlog.

The rest of the Product Backlog emerges to define “what” will fulfill the Product Goal.

A product is a vehicle to deliver value. It has a clear boundary, known stakeholders, well-defined users or customers.

A product could be a service, a physical product, or something more abstract.

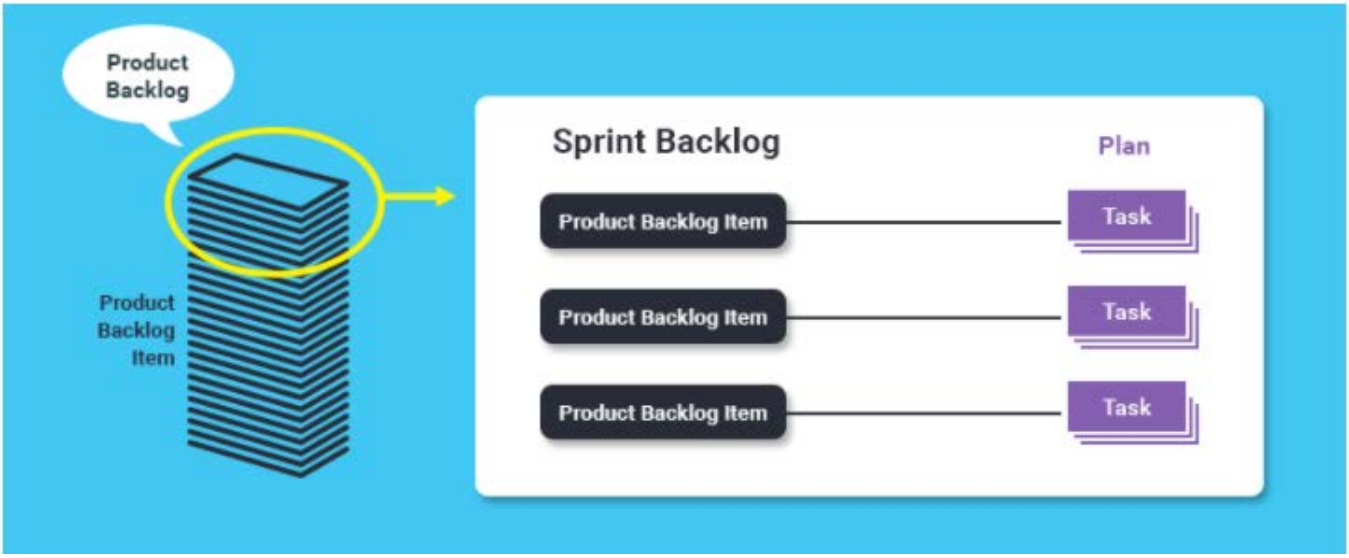
The Product Goal is the long-term objective for the Scrum Team.

They must fulfill (or abandon) one objective before taking on the next.

Sprint Backlog

The Sprint Backlog is composed of:

1. The Sprint Goal (why)
2. The set of Product Backlog items selected for the Sprint (what)
3. The action plan to deliver the Increment (how)



The Sprint Backlog is a plan by and for the Developers. It is a highly visible, real-time picture of the work that the Developers plan to accomplish during the Sprint in order to achieve the Sprint Goal.

The Sprint Backlog is updated throughout the Sprint as more is learned.

It should have enough detail that they can inspect their progress in the Daily Scrum.

Commitment: Sprint Goal

The Sprint Goal is the single objective for the Sprint.

Although the Sprint Goal is a commitment by the Developers, it provides flexibility in terms of the exact work needed to achieve it.

The Sprint Goal also creates coherence and focus, encouraging the Scrum Team to work together rather than on separate initiatives.

The Sprint Goal is created during the Sprint Planning event and then added to the Sprint Backlog.

As the Developers work during the Sprint, they keep the Sprint Goal in mind.

If the work turns out to be different than they expected, they collaborate with the Product Owner to negotiate the scope of the Sprint Backlog within the Sprint without affecting the Sprint Goal.

Increment

- An Increment is a concrete stepping stone toward the Product Goal
- Each Increment is additive to all prior Increments and thoroughly verified, ensuring that all Increments work together
- In order to provide value, the Increment must be usable
- Multiple Increments may be created within a Sprint
- The sum of the Increments is presented at the Sprint Review thus supporting empiricism
- However, an Increment may be delivered to stakeholders prior to the end of the Sprint
- The Sprint Review should never be considered a gate to releasing value
- Work cannot be considered part of an Increment unless it meets the Definition of Done

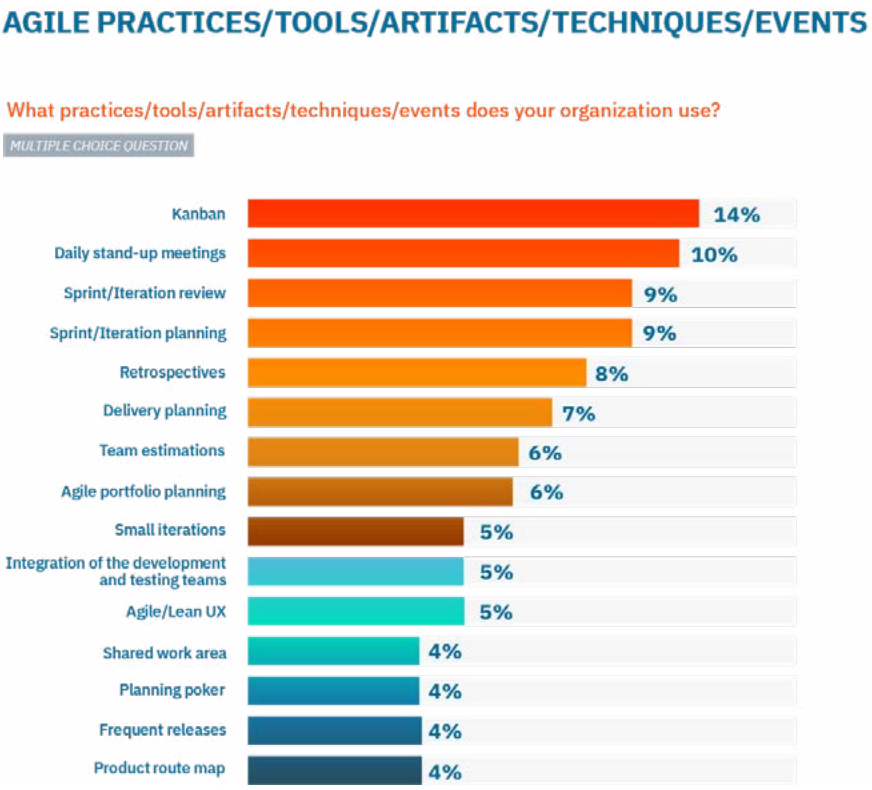
Commitment: Definition of Done

- The Definition of Done is a formal description of the state of the Increment when it meets the quality measures required for the product
- Increment
  - An increase was born at the time an item in the Product Backlog complies with the Definition of Done
- The Definition of Done creates transparency by providing everyone a shared understanding of what work was completed as part of the Increment
- If a Product Backlog item does not meet the Definition of Done, it cannot be released or even presented at the Sprint Review

Scrum's Three Pillars

- Definition of Done for an increment is part of the standards of the organization
- If it is not an organizational standard, the Scrum Team Scrum Team must create a Definition of Done appropriate for the product
- All Scrum Teams must follow the Definition of Done
- The Developers are required to conform to the Definition of Done
- If there are multiple Scrum Teams working together on a product, they must define and mutually comply with the same Definition of Done
- Increments that meet certain organizational security requirements can be included in the Definition of Done

Agile Practices



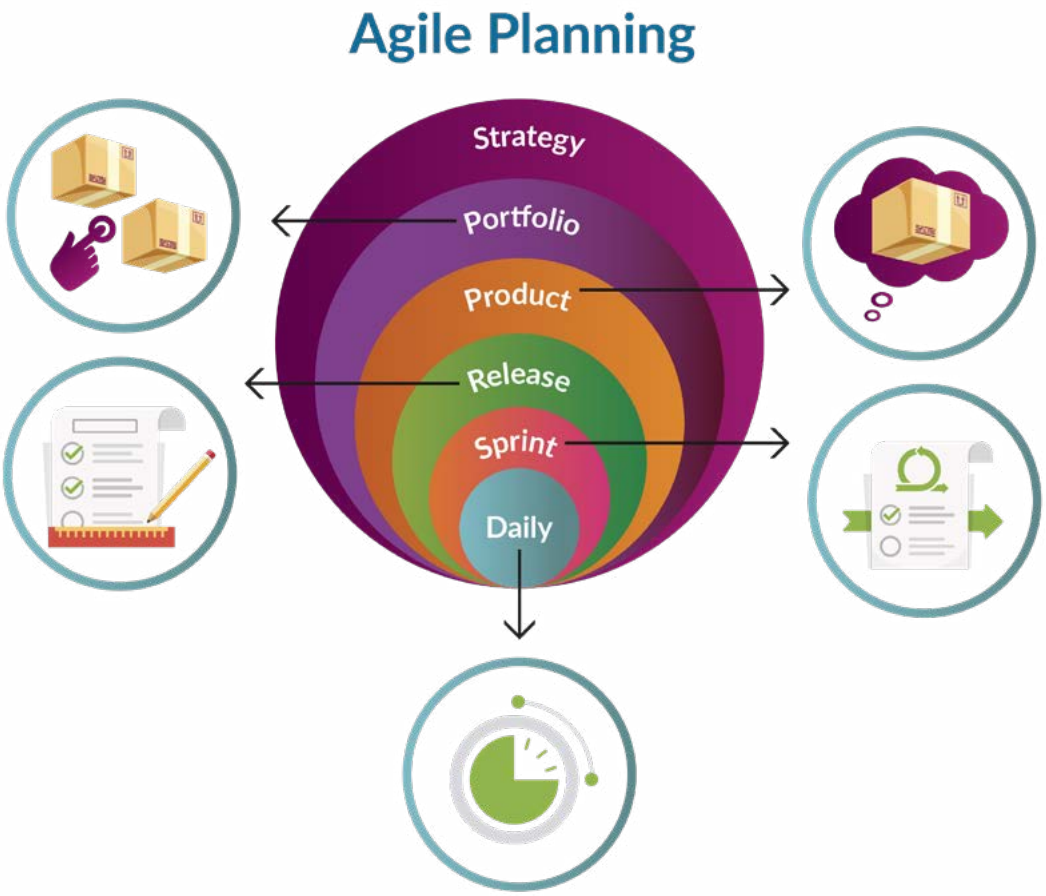
Source: Agile Adoption Report 2021
https://certiprof.com/pages/certiprof-agile-adoption-report-2021

SCRUM MASTER PROFESSIONAL CERTIFICATE

Agile Glossary

SMPC® Version 012022

CertiProf®



Advantages of Time-Boxing

A timebox is a previously agreed period of time during which a person or a team works steadily towards completion of some goal. Rather than allow work to continue until the goal is reached, and evaluating the time taken, the timebox approach consists of stopping work when the time limit is reached and evaluating what was accomplished.

Benefits:

- Efficient development processes
- Less overhead
- High speed for equipment
- Helps effectively manage project planning and execution

Key Concepts

Epic

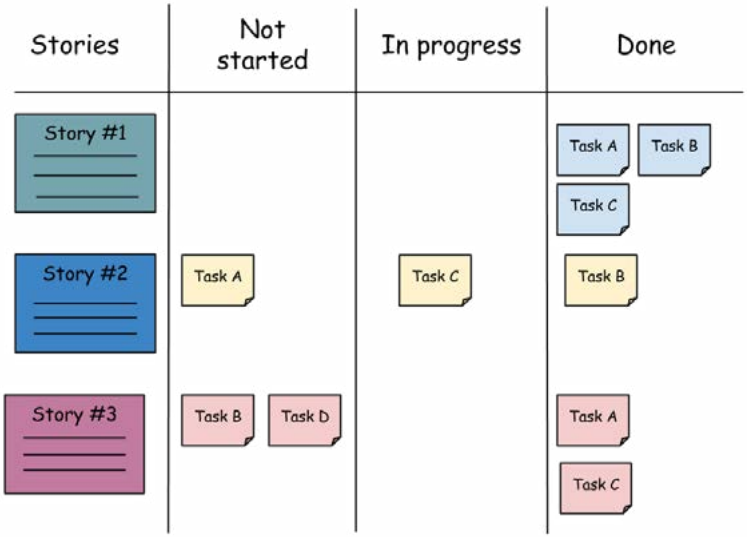
An epic is a large user story that cannot be delivered as defined within a single iteration or is large enough that it can be split into smaller user stories.

User Stories

In consultation with the customer or Product Owner, the team divides the work to be done into functional increments called "User Stories". Each user story is expected to produce, once implemented, a contribution to the value of the product in general, regardless of the order of implementation; The INVEST formula captures these and other assumptions about the nature of users' stories.

Task Board

In its most basic form, a task board can be drawn on a whiteboard or even a section of wall. Using electrical tape or a dry erase pen, the board is divided into three columns labeled “To Do”, “In Progress” and “Done”. Sticky notes or index cards, one for each task the team is working on, are placed in the columns reflecting the current status of the tasks.



Source: https://www.agilealliance.org/agile101/agile-glossary

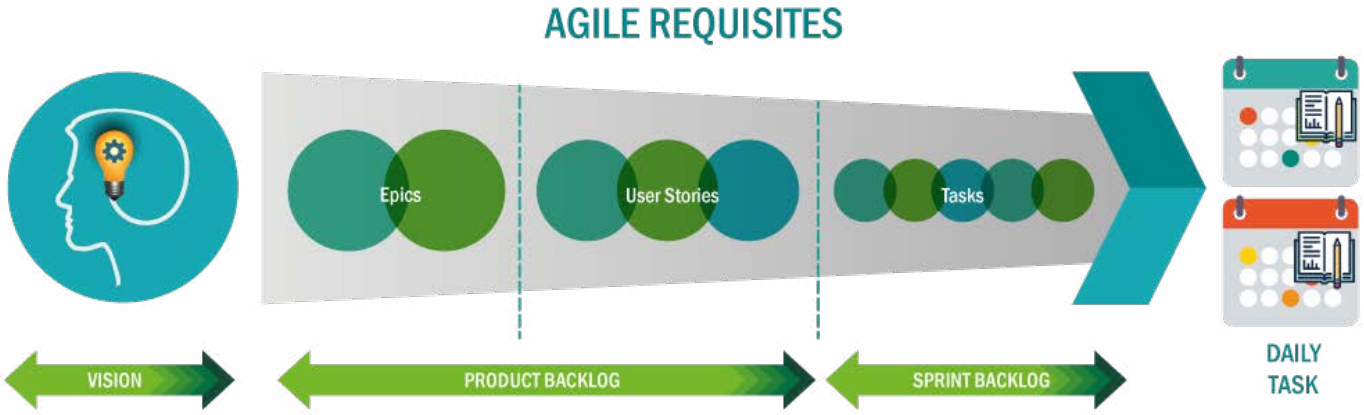
INVEST

The acronym INVEST helps to remember a widely accepted set of criteria, or checklist, to assess the quality of a user story. If the story fails to meet one of these criteria, the team may want to reword it, or even consider a rewrite (which often translates into physically tearing up the old story card and writing a new one).

A good user story should be:

- "I" ndependent (of all others)
- "N" egotiable (not a specific contract for features)
- "V" aluable (or vertical)
- "E" stimable (to a good approximation)
- "S" mall (so as to fit within an iteration)
- "T" estable (in principle, even if there isn't a test for it yet)

Level of Detail



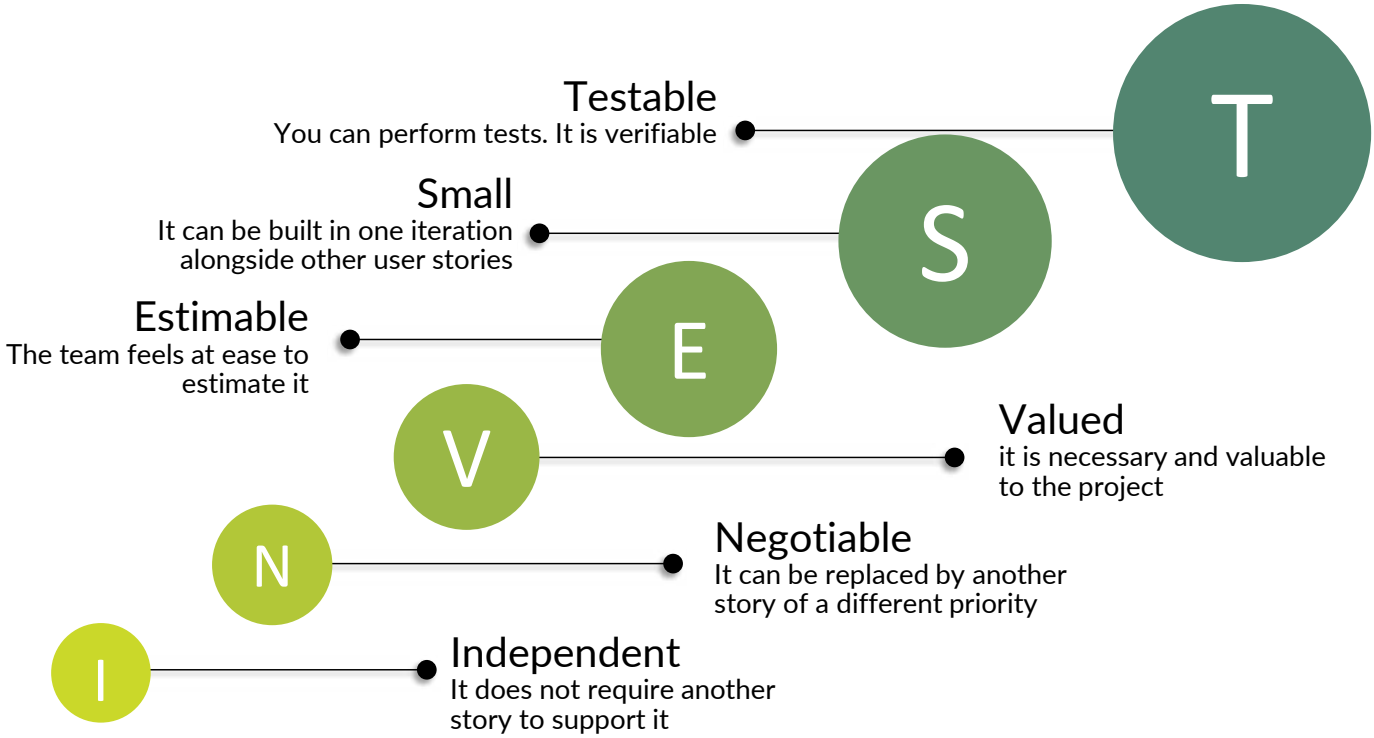
How is a User Story formed?

According to Ron Jeffries' formula, a User Story must consist of the 3 C's:

- Card: A physical token (often a Post-It note), which gives tangible and lasting shape to what would otherwise only be an abstraction
- Conversation: That takes place at different times and places during a project between the different people interested by a given feature of a software product: customers, users, developers and evaluators; this conversation is largely verbal but often complemented by documentation
- Confirmation: The objectives around which the conversation revolved have been achieved

Source: https://www.agilealliance.org/glossary/three-cs

Features: Invest Model



Task

In Scrum it can be defined as the technical work that Developers do to complete a Product Backlog item.

Most tasks are defined as small, which represents no more than a few hours of a day.

How is a Task formed?

SMART model features:

S: Specific
M: Measurable
A: Achievable
R: Relevant
T: Timely

Planning Poker Estimate

This is one of the most recognized techniques in Scrum, as it is very simple, fun, and effective, where developers estimate.

It was first defined and named by James Grenning in 2002 and later popularized by Mike Cohn.

A playful approach to estimation, used by many Agile teams.

The team meets in presence of the customer or Product Owner.

Around the table, each team member holds a set of playing cards, bearing numerical values appropriate for points estimation of a user story.

Kanban

The Kanban Method is a means to design, manage, and improve flow systems for knowledge work. The method also allows organizations to start with their existing workflow and drive evolutionary change.

They can do this by visualizing their flow of work, limit work in progress (WIP) and stop starting and start finishing.

The Kanban Method gets its name from the use of kanban – visual signaling mechanisms to control work in progress for intangible work products.

MVP

A minimum viable product (MVP) is a concept from Lean Startup that stresses the impact of learning in new product development.

Eric Ries, defined an MVP as that version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort.

This validated learning comes in the form of whether your customers will actually purchase your product.

Velocity

At the end of each iteration, the team adds up effort estimates associated with user stories that were completed during that iteration.

Knowing velocity, the team can compute (or revise) an estimate of how long the project will take to complete, based on the estimates associated with remaining user stories and assuming that velocity over the remaining iterations will remain approximately the same.

This is generally an accurate prediction, even though rarely a precise one.

Scrum of Scrum

A technique to scale Scrum up to large groups (over a dozen people), consisting of dividing the groups into Agile teams of 5-10.

Each daily scrum within a sub-team ends by designating one member as “ambassador” to participate in a daily meeting with ambassadors from other teams, called the Scrum of Scrums.

The Scrum of Scrums proceeds otherwise as a normal daily meeting, with ambassadors reporting completions, next steps and impediments on behalf of the teams they represent.

Resolution of impediments is expected to focus on the challenges of coordination between the teams; solutions may entail agreeing to interfaces between teams, negotiating responsibility boundaries, etc.

The Scrum of Scrum will track these items via a backlog of its own, where each item contributes to improving between-team coordination.

SMPC® Exam

Certification exam:

Format: Multiple selection
Questions: 40
Approval score: 32/40 or 80 %
Duration: 60 minutes
Open book: No
Delivery: This exam is available online
Supervised: it will be at the discretion of the coach/stelf-monitoring is available
Two attempts included

SCRUM MASTER PROFESSIONAL CERTIFICATE

Follow us, get in touch!

www.certiprof.com

CertiProf®