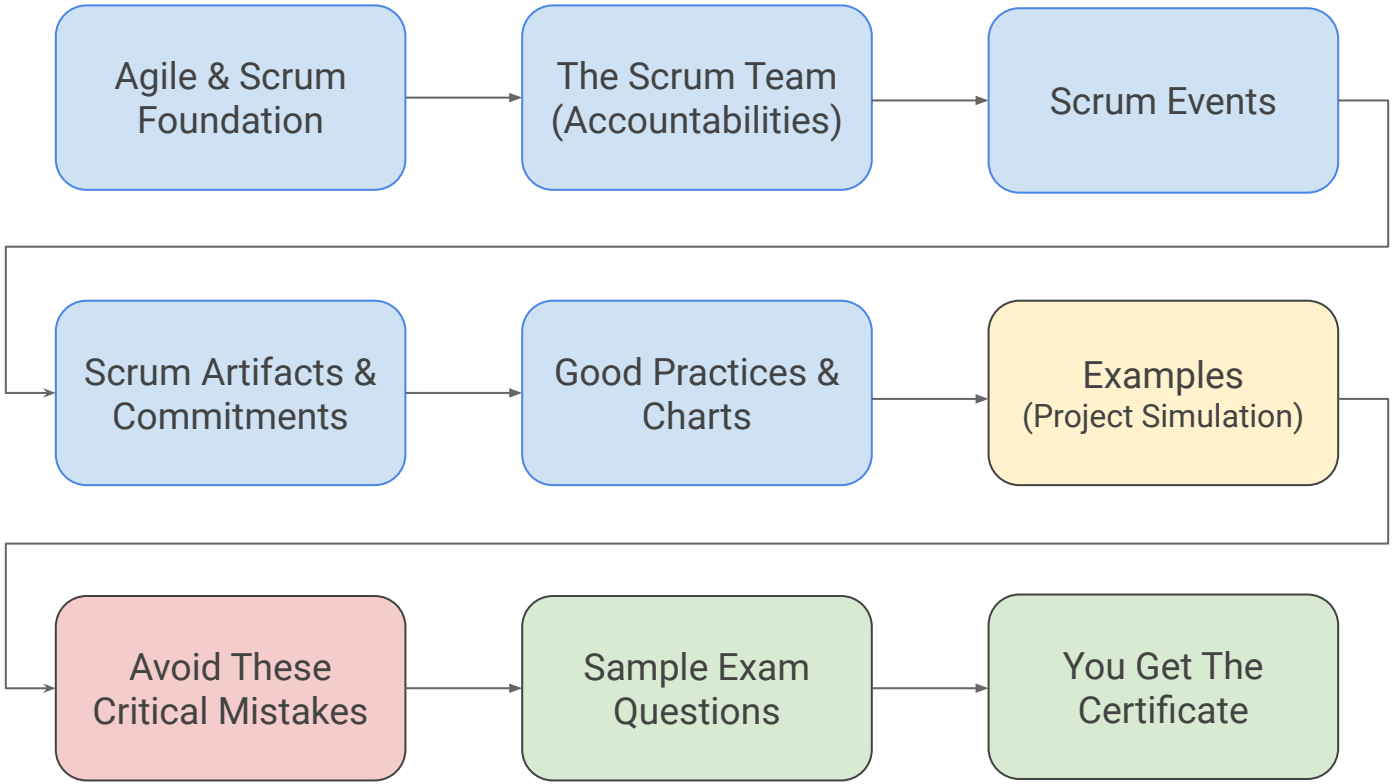
Roadmap To Success



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*The authors of the Scrum Guide™ are **Ken Schwaber** and **Jeff Sutherland**.*

*The Nexus Guide™ is developed and sustained by **Ken Schwaber** and **scrum.org™***

*Evidence-Based Management™ was collaboratively developed by scrum.org™, the **Professional Scrum Trainer Community, Ken Schwaber, and Christina Schwaber.***

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Introduction to Agile & Scrum - Part 1

1. *“Scrum is a **lightweight framework** that helps people, teams and organizations generate value through adaptive solutions for complex problems.” - Scrum Guide™*
2. *”Scrum is founded on **Empiricism** and **Lean Thinking**” - Scrum Guide™*
3. Three pillars uphold Scrum - **Transparency**, **Inspection**, and **Adaptation**.
4. **Five Scrum Values** - Commitment, Courage, Focus, Openness, and Respect.
5. **Five Scrum Events** - Sprint Planning, the Sprint, Daily Scrum, Sprint Review, and Sprint Retrospective.
6. All Scrum events are **timeboxed** (we cannot extend their duration).
7. All of the events vary in length depending on the length of the Sprint, **except the Daily Scrum**.
8. A Sprint can be a **maximum of 1 month.**
    a. Scrum Teams **choose** the length of the Sprint.

Introduction to Agile & Scrum - Part 2

9. **For a 1-month Sprint the events are timeboxed as follows:**
    a. Sprint Planning - a maximum of 8 hours.
    b. Sprint Review - a maximum of 4 hours.
    c. Sprint Retrospective - a maximum of 3 hours.
    d. Daily Scrum is **always** 15 minutes.
10. For shorter than 1-month Sprints, the events are **usually shorter** as well.
11. All Scrum Events, **besides the Sprint**, can end sooner as long as the purpose of the event is achieved.
12. **Three different sets of accountabilities** - The Developers, Scrum Master™, and Product Owner™.
13. There are no **Project Managers** or **Team Leaders within** a Scrum Team.
14. There are no **sub-teams** or **hierarchies** within a Scrum Team.
15. Scrum Teams are **cross-functional** and **self-managing**.

Introduction to Agile & Scrum - Part 3

16. **Three Scrum Artifacts and their Commitment.**
    a. The Commitment for the **Product Backlog** is the **Product Goal**.
    b. The Commitment for the **Sprint Backlog** is the **Sprint Goal**.
    c. The Commitment for the **Increment** is the **Definition of Done**.
17. Both Scrum & Agile use an ***incremental and iterative approach*** to development.
    a. Incremental - *“Let’s build some of it before we build all of it”*
    b. Iterative - In one iteration (Sprint), we go through all of the development processes to create a **usable** increment.
18. Plan-Driven Development (Waterfall) is about creating **one huge increment** with **one huge iteration**.

The Scrum Team - Part 1

1. There are **three different sets of accountabilities** in a Scrum Team
    a. The Scrum Master™
    b. The Product Owner™
    c. The Developers
2. The Scrum Team is **cross-functional** & **self-managing.**
3. The Scrum Team is typically **10 or fewer people.**
    a. If the Scrum Team becomes too large, we have to consider reorganizing it **into multiple cohesive Scrum Teams**.
4. There are **no sub-teams or hierarchies** in a Scrum Team.
5. The entire Scrum Team is responsible for **all product-related activities including…**
    a. Product Releases
        i. We can release **as many times as we want** during the Sprint.

The Scrum Team - Part 2

i. Stakeholder collaboration
ii. Verification
iii. Maintenance
iv. Operation
v. Experimentation
vi. Research and development
vii. And more.

6. ***"The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint."***

- Scrum Guide™

7. The entire Scrum Team **creates the Sprint Goal.**
8. The entire Scrum Team **creates the Definition of Done.**

Scrum Master™ Summary - Part 1

1. The SM (Scrum Master™) is **accountable** for the Scrum Team's **effectiveness**.
2. The SM is a **true leader**.
    a. **The SM serves the Scrum Team**
        i. They **cause** the removal of impediments to the Scrum Team's progress.
        ii. They ensure that all Scrum events **take place** and are positive, productive, and **kept within the timebox.**
    b. **The SM serves the Product Owner™**
        i. They facilitate **stakeholder collaboration** when requested or needed.
        ii. They help the PO to find techniques for **effective Product Goal definition** and **Product Backlog management;**
    c. **The SM serves the Organization**
        i. They **lead**, **train** and **coach**, the organization in its Scrum adoption

Scrum Master™ Summary - Part 2

3. The SM acts as a team **coach** and **teacher**. They manage not the people but the **process**.
    a. They possess what's called ***"Process Authority"*** and make sure everyone understands and enacts the Scrum **theory**, **values**, **rules**, and **practices**.
4. The Scrum Master™ is **NOT** a Project Manager.
    a. A Project Manager role **does not exist** in Scrum.
5. They can work **part-time** as well as **full-time**.
6. Scrum doesn't prohibit one person to act as a SM and a PO but **it doesn't recommend it** either. The same applies to SM and a Developer.

Scrum Master™ Summary - Part 3

1. **The 8 misunderstood stances of a SM are:**
    a. A Scribe, A Secretary, The Scrum Police, The Team Boss, The Admin, The Chairman, A Superhero, and The Coffee Clerk.
2. **The 8 preferred stances of a SM are:**
    a. Servant Leader, Coach, Facilitator, Teacher, Mentor, Manager, Impediment Remover, and a Change Agent.
3. As a Scrum Master, you should **restrain from solving a problem.**
    a. By doing so, you give the Scrum Team the opportunity to learn and grow. **Respect Self-Management.**
4. If the members of the team are trying to solve a problem, **do not intervene.**
5. If the members of the team identify a problem but do nothing about it, then **you should intervene.**
6. It is **natural** for conflicts to occur when people work together.
7. As a SM, you should develop a skill set to help you **navigate conflicts.**
8. Keep the conflicts at a low level where **constructive disagreement** happens.
9. A SM **does not accept or reject decisions** and **does not tell people what to do**.
10. As a Facilitator, the SM remains **neutral**.

Product Owner™ Summary - Part 1

1. The PO (Product Owner™) is a **value maximizer.**
2. They are **accountable** for **effective Product Backlog Management**, which includes…
    a. Creating and communicating a **Product Goal.**
    b. **Creating** and **explaining** PBIs.
    c. **Ordering** the Product Backlog.
    d. Making sure the Product Backlog is **transparent**.
3. **The PO is one person**, not a committee.
4. To succeed, everyone in the organization **must respect his or her decisions.**
5. **Only** the PO has the **authority to cancel a Sprint.**

Product Owner™ Summary - Part 2

7. The PO is **extremely knowledgeable about the marketplace** of the Product.
8. During Sprint Planning the PO brings a **business objective** based on which the Scrum Team collaboratively crafts the Sprint Goal.
9. During the Sprint Review, the PO **seeks feedback** from key stakeholders.
10. PO must be **available to answer any questions** the developers have!
11. The PO reviews **“Done”** items.
    a. If he or she has written **Acceptance Criteria** for the PBIs, they make sure the conditions are met. Writing Acceptance Criteria for the PBIs is NOT mandatory but the Definition Of Done **is**.
12. If 2 Products are being developed, there can be one person acting as a PO for both Products. As well as, there can be 2 POs, one for each Product.

The Developers Summary

1. The Developers are the people **who create a usable increment** each Sprint.
2. They create the **plan** for the Sprint, this is the Sprint Backlog.
3. The developers choose **the number of PBI to select** from the Product Backlog to the Sprint Backlog.
4. They are **responsible for sizing** the PBIs and the **techniques** they would use to turn PBIs into a usable increment.
5. Developers are **required to participate in Daily Scrum** and come up with an actionable plan for the next day.
6. Developers are **required to conform to the DoD (Definition of Done).**
7. If there are multiple Scrum Teams working together on a Product, they must **mutually define** and **comply** with the **same DoD**.
8. **Both the Developers and the PO do Product Backlog Refinement.**
9. The Developers **hold each other accountable** as professionals.

Skills Within The Scrum Team™

1. To become high-performing, Scrum Team™ Members must **collaborate**.
2. Scrum Team™ Members should not let **ego** get in the way.
3. The Scrum Master™ encourages individuals to **learn and develop continuously**.
4. If multiple Scrum Teams™ are faced with **the impediment of a missing skill,** consider the following…
    a. **Hiring is not a good option.**
    b. **Facilitate the developers** to self-organize and find a solution.
    c. One person that has the missing skills can **consult the teams** so they can create an integrated increment. Or that person can **teach the developers** so that the skill is developed.

The Sprint Summary

1. *“Sprints are the heartbeat of Scrum, where ideas are turned into value.”* - Scrum Guide™
2. **The purpose of the Sprint is to create usable increments.**
    a. We can consider Sprints as **short Projects.**
3. The Sprints happen one after another. There are no pauses or other events.
4. The maximum duration of the Sprint is **one month.**
5. Typically, when the project is risky, shorter Sprints are preferred, so we can generate more learning cycles.
6. The Sprint can be canceled when the Sprint Goal becomes **obsolete**.
7. **Sprint cancellation is bad for the team,** and it requires regrouping of the team, a new Sprint Planning event, as a result, resources are lost.
8. **During the Sprint quality goals do not decrease,** and scope might be re-negotiated as more is learned.
    a. The Scrum Team **does not make changes that would endanger** the Sprint Goal.

The Sprint Planning Summary

1. During Sprint Planning, the PO ensures that attendees are prepared to discuss the most important PBIs and **how they map to the Product Goal**.
2. During Sprint Planning we answer **three** important questions:
    a. ***Why*** *is this Sprint Valuable?*
    b. ***What*** *can be done this Sprint?*
    c. ***How*** *will the chosen work get done?*
3. **The entire Scrum Team attends and collaborates on creating the Sprint Goal.**
4. The Developers decide **how many PBIs to select** for the Sprint Backlog.
5. The Developers decide **on the practices they would use** to turn PBIs into a usable increment.
6. The more the Developers know about their **past performance**, **upcoming capacity**, and the **DoD**, the more accurate forecasts they would be able to do.
7. The Sprint Backlog is created during Sprint Planning and it is a combination of 3 things.
    a. **The Sprint Goal**, the **selected PBIs**, and a **Plan** to deliver them.
8. The Scrum Team **may invite other people to attend Sprint Planning** to provide advice.
9. **Sprint Planning is a maximum of 8-hours** for a 1-month Sprint. It is usually shorter for shorter Sprints.

The Daily Scrum Summary - Part 1

1. The purpose of the Daily Scrum is to **inspect** progress towards the Sprint Goal and **adapt** the Sprint Backlog if needed.
2. Daily Scrum is a **mandatory** event for **all Developers** of the Scrum Team.
3. The SM ensures that Daily Scrum takes place, but the Developers are responsible for conducting the event.
4. During Daily Scrum, the Developers **plan the work for the next day.**
5. The SM and PO **are allowed** to attend Daily Scrum.
6. **Daily Scrum is always 15 minutes** (regardless of the length of the Sprint and the number of Developers).

The Daily Scrum Summary - Part 2

7. **Daily Scrum is held at the same time and place** every working day of the Sprint to reduce complexity and eliminate waste.
8. **Developers choose the structure of the Daily Scrum event.**
9. The focus of the event should be:
    a. *“Progress towards the Sprint Goal”*
    b. *“An actionable plan for the next day.”*
10. Daily Scrums...
    a. *Improve communications,*
    b. *identify impediments,*
    c. *promote quick decision-making,*
    d. *and consequently eliminate the need for other meetings.*
11. **The developers are allowed to adjust their plan** to achieve the Sprint Goal **outside** Daily Scrum as well. Often, they meet throughout the day for more detailed discussions.

The Sprint Review Summary

1. **The purpose of the Sprint Review event 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.
2. Attendees of the Sprint Review event are the **Scrum Team** and **key stakeholders**.
3. **Sprint Review is not just a demo or a presentation of the increment.**
4. The Scrum Team presents only items that have been 100% done according to the DoD.
5. If a customer routinely skips this event, the expectations of the Scrum Team and the customer would become misaligned and both parties would not be happy.
6. The Product Backlog **may** also be adjusted to meet new opportunities.
7. The Sprint Review is a maximum of **4 hours** for a 1-month Sprint, it is usually shorter for shorter Sprints.

The Sprint Retrospective Summary

1. The main purpose of the Sprint Retrospective is to plan ways to increase **quality** and **effectiveness**.
2. *"The Scrum Team inspects how the last Sprint went with regards to **individuals**, **interactions**, **processes**, **tools**, and their **Definition of Done**"* - Scrum Guide™
3. It is a maximum of **3 hours** for a 1-month Sprint.
    a. For shorter Sprints, the event is usually shorter.
4. It is an opportunity to **inspect** and **adapt** the **process** the Scrum Team has been using to build the increments.
5. **The whole Scrum Team attends the event.**
6. During the Sprint Retrospective, we talk about the context, not the content.
    a. For example, **tools** to help us communicate with members of the team who work remotely. Or the importance of **communication** between team members. Or the **length** of the Sprint. Or the **structure** of the Daily Scrum. Or the **DoD**, and so on.

Scrum Artifacts & Their Commitments

1. **There are 3 Scrum Artifacts**:
    a. The Product Backlog
    b. The Sprint Backlog
    c. The Increment
2. Each **Scrum Artifact contains a commitment** to ensure it provides information that enhances transparency and focus.
    a. For the **Product Backlog**, it is the **Product Goal**.
    b. For the **Sprint Backlog**, it is the **Sprint Goal**.
    c. For the **Increment**, it is the **Definition of Done**.
3. **The three commitments are mandatory**.
4. The PO creates and is accountable for the Product Goal.
5. The entire Scrum Team creates and is accountable for the Sprint Goal.
6. The entire Scrum Team creates and is accountable for the Definition of Done.

Product Backlog Summary

1. The PB (Product Backlog) is an **ordered list of items**.
2. It is the single source of work undertaken by the Scrum Team.
3. The PB is ordered in a way that **maximizes the value the product delivers**.
4. **The PB is never complete.** It is ever-changing and dynamic.
5. **One Product has:**
    a. One Product Backlog
    b. One Product Owner™
    c. One Product Goal at any given time
6. PBIs on top of the PB are **clearer**, hence **smaller** than those on the bottom.
7. *"**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."* - Scrum Guide™

The Product Goal Commitment

1. **The Product Goal describes a future state of the Product.**
    a. *"The Product Goal is the **long-term objective** for the Scrum Team."* - Scrum Guide™
2. The PO is accountable for ***creating*** *and* ***explicitly*** *communicating the Product Goal*.
3. We cannot have more than one Product Goal <u>at any given time</u>.
4. It is recommended that the Product Goal is **clear** and **concise**.
5. Each increment (Sprint) moves the Product toward the Product Goal.
6. The Product Goal is **measurable**, the Scrum Team knows when the goal has been achieved.
7. **The Product Goal can change**, but it is highly unlikely for this to happen during a Sprint.
8. Refinements to the Product Goal happen during the **Sprint Review event.**
9. Generally, the Product Goal is one part of a bigger **Product Vision.**
10. **Multiple Scrum Teams** working on the same Product, share the same Product Goal, the same Product Backlog, and the same Product Owner™.

The Sprint Backlog & The Sprint Goal

1. The SB (Sprint Backlog) consists of **3 things:**
    a. **The Sprint Goal** (which is the **why**).
    b. **The selected PBIs** (which is the **what**).
    c. **The Plan** for delivering the Increment (which is the **how**).
2. The SB is a plan **by** and **for** the Developers.
3. **The SB is highly-visible.**
4. The SB **changes** during the Sprint.
5. The PO and the Developers may change/negotiate the scope of the Sprint but this should not affect the Sprint Goal in any way.
6. We move the incomplete items back to the **Product Backlog** for future considerations.
7. The Sprint Goal helps the team stay **focused** during the Sprint.

The Increment Summary

1. An Increment is a **stepping stone** toward the Product Goal.
2. Each Increment is **additive to all prior increments.**
3. The Scrum Team creates one or multiple Increments each Sprint.
4. All Increments must be **verified** and **usable**.
5. **The whole Scrum Team decides** when to release the Increment.
6. **Scrum does not tell us when to release.** We can release as many times as we want.
7. Work cannot be considered part of an Increment **unless** it meets the Definition of Done.

The Definition of Done (DoD) Summary

1. *"The DoD is a **formal description of the state of the Increment** when it meets the quality measures required for the Product."*
2. The DoD is **mandatory** and it increases **transparency**.
3. If DoD is part of organizational standards, the Scrum Team **must follow it as a minimum.**
4. If DoD is not part of organizational standards, the **Scrum Team must create one** that is appropriate for the Product.
5. **The DoD may be improved** during the project, the result would be a higher quality of the work.
6. If multiple Scrum Teams are working on the same Product, **they must mutually define and comply with the same DoD** for the integrated increment.

Solutions To The Main Reasons For Failure - Recap

1. **Read carefully.**
2. Beware words like **attend**, **participate**, **can**, **could**, **should**, **must**, **required** and so on.
3. **Don’t be distracted.**
    a. Stay focused on the question and **don’t panic** if you don’t know a question. Move on!
4. Beware questions that contain the word **NOT** - this changes everything!
5. **Beware multiple-choice** questions.
    a. Select as many as it’s indicated in the question. No more, no less.
6. **It’s better to guess** than to leave a question unanswered.
7. If you have a chance, **do a second round!**

Definition Of Done

(For All User Stories)

VS

Acceptance Criteria

(It’s Different For Each User Story/Task)