

Note: *This document is simply my personal dummy guide and a basic overview on principles, concepts and practices related to Scrum Master. It does not represent all of the teachings and concepts by Scrum community. Please refer to the actual Scrum Alliance & Scrum.org website for further references. Thank You.*

What is the Scrum?

- **LIGHTWEIGHT FRAMEWORK** that helps people, teams and organizations generate value through adaptive solutions for complex projects, **INCOMPLETE** Framework, Collective Intelligence

Scrum makes visible the relative **EFFICACY**: (meaning effectiveness)

- Current Management • Environment Work • Techniques

How was Scrum Founded?

- Scrum is founded on **EMPIRICISM** and **LEAN THINKING**
What is **Empiricism**? Empiricism asserts that knowledge comes from experience and making decisions based on what is observed.

What are 3-Pillars of Scrum?

- Inspection • Adaption • Transparency

What are 5-Values of Scrum? CCFOR

- Courage • Commitment • Focus • Openness • Respect

What comprises the Scrum Framework?

- Roles • Artifacts • Events • Rules

What are Four FORMAL EVENTS in Scrum to Inspect and Adapt?

1. Daily Scrum
2. Sprint Retrospective
3. Sprint Review
4. Sprint Planning

5. Sprint (INFORMAL)

Who are the **Three ACCOUNTABILITIES** of Scrum Team? 10 people or less

1. Scrum Master (1)
2. Product Owner (1)
3. Developers (3-8)

What are the **FEATURES** of the Scrum Team?

- Should have all competencies needed to accomplish the work without depending on others not part of the team
- Should choose how best to accomplish their work, rather than being directed by others outside the team

What is Scrum Master?

- Help everyone understand Scrum Theory and Practice. **TRUE LEADERS**, Most Responsible for Promoting & Supporting Scrum

What are general Responsibilities of Scrum Master:

- Facilitates Scrum Events
 - Ensures Events are completed within their Time Box
 - Ensures no one **DISRUPTS** the Events such as Daily Scrum Meeting
- Removal of **IMPEDIMENTS** to the Development Team's Progress
- Coaches Scrum Team to be Self-Managed and Cross-Functional
- Helps the Scrum Team be Effective and create high value increments that meet DoD
- Encourages Scrum Team to improve Development process
- Reminds the Team about the Scrum Theory, Rules, Practices, Values, and Empiricism
- Plans Scrum Implementations within the organizations

How does the Scrum Master serve the **SCRUM TEAM OR DEVELOPERS?**

1. **COACHING** the team members in Self-Management and Cross-Functionality

2. Helping the Scrum Team **FOCUS** on creating **HIGH VALUE INCREMENTS** that meet the Definition of Done;
3. Causing the **REMOVAL** of **IMPEDIMENTS** to the Scrum Team's progress
4. **ENSURING** that all Scrum **EVENTS** take place and are positive, productive, and kept within the timebox.

How does the Scrum Master serve the **ORGANIZATION**?

1. Leading, training and **COACHING** the Organization in Scrum **ADOPTION**
2. **PLANNING** Scrum Implementations within organization
3. Helping employees and stakeholders understand and **ENACT** an **EMPRICAL** approach for Complex Work
4. **REMOVING BARRIERS** between Stakeholders and Scrum Teams

How does the Scrum Master serve the **PRODUCT OWNER**?

1. Helping **FIND TECHNIQUES** for effective Product Goal definition and Product Backlog management
2. Helping the Scrum Team understand the need for **Clear and Concise** Product Backlog Items
3. Helping establish **EMPIRICAL PRODUCT PLANNING** for a complex environment
4. Facilitating **STAKEHOLDER collaboration** as requested or needed

How does the Scrum Master serve the **DAILY SCRUM**?

1. **TEACHES** the Scrum Team to keep Daily Scrum within 15-min
2. **ENSURES** that the meeting goes ahead
3. If others are present at the Daily Scrum, ensures that they do not **DISRUPT** the meeting resulting in an overrun

What is the Product Owner?

- Product Value Maximizer, One person and NOT Committee

PRODUCT OWNER

What are the **CHARACTERISTICS** of a Product Owner?

1. Product Marketplace Expert
2. Lead facilitator of Key Stakeholder Involvement
3. Product Value Maximizer

What is the Product Owner's role in Product Backlog Management?

1. Creates, Owns and Manages the **Product Backlog**
2. Developing and explicitly communicating the **Product Goal**
3. Creating and Clearly communicating and expressing **Product Backlog Items**
4. Ordering **Product Backlog Items**
5. Ensuring that Product Backlog is visible, transparent and clear
6. Optimizing the value of the work
7. Ensuring the Development Team understands the items to the level needed

DEVELOPER

What are Developers?

- Developers are committed to creating **USABLE INCREMENT** to each Sprint, Size 3-10 people, Manage **SPRINT BACKLOG**

What are Developers **ACCOUNTABLE** for?

1. Creating a plan for the Sprint, the Sprint Backlog;
2. Instilling quality by adhering to a Definition of Done;
3. Adapting their plan each day toward the Sprint Goal; and,
4. Holding each other accountable as professionals

What are **CHARACTERISTICS** of Developer?

- Developers create a **PLAN** for the Sprint and Sprint Backlog
- **NO Hierarchies** in Development Team or Scrum Team
 - No Lead Dev or Senior Developer
 - No titles is allowed (dev-lead, tester, etc.)
 - No sub teams allowed (front end backend, etc.)
 - Accountability belongs to the Developers as a Whole

SCRUM EVENTS

What is the Scrum Events?

- CONTAINER for all Events, Inspect and Adapt Scrum Artifacts, Events are held at the SAME TIME & SAME LOCATION

What are the 5-Scrum Events?

1. Sprint Planning | 8hrs
2. Sprint | 1-month
3. Daily Scrum | 15-min
4. Sprint Review | 4hrs
5. Retrospective | 3hrs

What is the Sprint Planning? 8hrs

- **Time-Boxed Event** occurs at **BEGINNING** of each Sprint where the whole Scrum Team determines which Product Backlog Items will be worked during that specific Sprint

What **Three TASKS** go into Sprint Planning?

1. Creating a **Sprint Goal**
2. **SELECTING** Product Backlog **Items** into Sprint Backlog (aka Scope of Sprint) (Note: Selected Items represent "**FORECAST**")
3. Creating a **PLAN** for Delivering the Increment

What **Three TOPICS** addressed in Sprint Planning?

1. **WHY** is this Sprint Valuable?
2. **WHAT** can be done in the Sprint? Or What is planned for the sprint?
3. **HOW** will the chosen Items get done in the Sprint?

Who **ATTENDS** the Sprint Planning?

- Product Owner, Scrum Master, and Developer (**Stakeholder & Other People are OPTIONAL**)
- OR Scrum Team and INVITED people to provide ADVICE

What role does Developer play in Sprint Planning?

- Plan the work to create an Increment by selecting specific Product Backlog Items that meets DoD
- **DECOMPOSE** Product Backlog Items into smaller work items of **ONE DAY** or Less

What is the Sprint? 1-month

- **Time-Boxed Event** when a Scrum Team works to **complete a set amount of work**/items from the Sprint Backlog, **HEART** of Scrum

SPRINT

What happens **DURING** the **SPRINT**?

1. No changes are made that would endanger the Sprint Goal;
2. Quality does not decrease;
3. The Product Backlog is refined as needed; and,
4. Scope may be clarified and renegotiated with the Product Owner as more is learned.

What knowledge helps Developers select what can be **DONE/COMPLETED** within a **SPRINT**?

1. Developer's Past Performance
2. Developer's Capacity
3. Definition of Done

Why and Who would **CANCEL** a **SPRINT**?

- PO has **AUTHORITY** to cancel the Sprint
- Sprint can only be **CANCELLED** by the **Product Owner** and when the Sprint Goal is **OBSOLETE**.

What happens when a Sprint is **CANCELLED**?

- Any **COMPLETE** or **DONE** Items are **REVIEWED**
- Any **INCOMPLETE** Items gets **RE-ESTIMATED** and put back in the original Product Backlog.
- If part of the Work is potentially **RELEASABLE**, the PO typically accepts

Can you have a DEDICATED SPRINT just to remove all the Technical Debt ONLY?

- NO. Purpose of each Sprint is to deliver Increments of potentially releasable functionality that adhere to the Scrum Team's current definition of "Done."

What is the definition of Product?

- 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.

What is the Daily Scrum?

- **Time-Boxed Event** that is a daily meeting for **Developers ONLY** (not Scrum Master), Daily Scrum is held at the **SAME TIME & SAME PLACE**

Who attends the Daily Scrum? 15-min

- Developers (Required), **Scrum Master** (not required)

What is the PURPOSE Daily Scrum?

- To INSPECT progress towards the Sprint Goal
- ADAPT the Sprint Backlog as Necessary
- ADJUST the Upcoming Planned Work

What do the Developers do during Daily Scrum?

- Monitor their progress towards their Sprint Goal
- Create a PLAN for the next 24 hours.
- Identify Impediments

What are 3-Questions to ask during the Daily Scrum? NOT MANDATORY

1. What did I do yesterday?
2. What will I do today?
3. Do I see any Impediments?

SPRINT REVIEW

What is the Sprint Review? 4-hrs

- **Time-Boxed Event** held at the END of the Sprint to inspect the Product Increment and Adapt Product Backlog if needed

What is the PURPOSE of Sprint Review?

- Inspect Outcome of the Sprint
- Determine Future Adaptations of Product Backlog

Who ATTENDS the Sprint Review?

- Scrum Master, Product Owner, Developers, Stakeholders

What happens if an Product Backlog Item does not meet DoD in the Sprint Review meeting?

- It cannot be Presented or Released at the Sprint Review
- Item is returned to Product Backlog for future consideration

SPRINT RETROSPECTIVE

What is the Sprint Retrospective? 3-hrs

- **Time Box Event** that is LAST meeting at the end of the Sprint for which the goal is to plan ways to increase Quality and Effectiveness

What is the PURPOSE of Sprint Retrospective?

- INSPECT how the LAST Sprint went (Individuals, Interactions, Processes, Tools and DoD)
- IDENTIFY most helpful changes to IMPROVE the EFFECTIVENESS on the next Sprint
- CREATE a PLAN for IMPLEMENTING Improvements, Increase Quality and Effectiveness
- Reviews ways of working and how to improve

How do we address the IMPROVEMENTS identified in Sprint Retrospective?

- Most IMPACTFUL improvements are addressed as SOON as possible to the next Sprint Backlog on the next Sprint

- Other LOWER PRIORITY improvements can be added to the Product Backlog

SCRUM ARTIFACTS

What are Scrum Artifacts?

- Artifacts represent WORK or VALUE, MAXIMIZE Transparency

What are 3-Scrum Artifacts & Commitments?

1. Product Backlog | Product Goal
2. Sprint Backlog | Sprint Goal
3. Increment | Definition of Done

What is the Product Backlog?

- **SINGLE SOURCE of REQUIREMENTS** that is also an **ORDERED LIST**
- **NEVER COMPLETE, ALWAYS CHANGING, ADAPTIVE**
- Product Owner owns Product Backlog

What are ATTRIBUTES of Product Backlog? NOT MANDATORY

- **Description, Order, Size (aka Estimate)**, Value (Fibonacci Sequence), and Acceptance Criteria

PRODUCT BACKLOG

What makes a Product Backlog Item "READY"?

- They are clearly stated, refined, and understood by Scrum Team such that a forecast of items can be made to implement the Sprint Goal (aka Selected Items in Sprint Backlog)

What are **FEATURES** Of Product Backlog?

- It is Dynamic
- As long as a Product Exists, Product Backlog also Exists
- It is Never Complete

Who & When are ESTIMATES created on the Product Backlog Items?

- Developers are responsible for **ESTIMATES** on Product Backlog Items but with collaboration of other members in Scrum Team

- Product Backlog Items are estimated during the Product Backlog Refinement meeting

What does the Product Backlog **MANAGEMENT** include?

1. Developing and explicitly **communicating** the Product Goal;
2. **CLEARLY** communicating Product Backlog items;
3. **ORDERING** Product Backlog Items to best achieve goals and missions
4. Ensuring the Product Backlog is **Transparent, Visible** and **Clear** to all.
5. **OPTIMIZING** the **Value** of the Work the Development team performs
6. Ensuring the Developers understands Product backlog Items to the **LEVEL** needed

What is the Product Goal?

- Long Term objective of the Product or the **FUTURE STATE** of the product that is required to be built and completed in the months ahead

Why is a Product Goal created by Product Owner or **IMPACT**?

1. Gives an **OVERARCHING DIRECTION**, so individual Sprints represent a step toward a **LARGER GOAL**
2. Facilitates the **INSPECTION** process at the end of the Sprint
3. Helps the Scrum Team stay **FOCUSED**
4. Product Goal guides Scrum Team during **MULTIPLE** Sprints

What is a Product?

- 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.

What is Product Backlog Refinement?

- Ongoing Activity, Never Completed, Always Evolving
- No Official Meeting, Not Mandatory

- Best to update during Sprint
- Act of breaking down Product Backlog Items and further defining them into smaller precise Items
- Adding Details, Estimates, and Order to the Product Backlog

What are BENEFITS of Product Backlog Refinement?

- Increase Transparency, Clarify the Value, Reduce Dependencies, Incorporate Learning, Forecasting, Break items into consumable pieces

What is Sprint Backlog?

1. Achieving the **Sprint Goal** (Why)
2. Set of top **Product Backlog Items** selected for the individual Sprint that were broken down into smaller backlog items (What)
3. **Actionable Plan** for delivering the Increment (How)

What OWNS the Sprint Backlog?

- Developers

When is Sprint Backlog **CREATED**?

- During Sprint Planning

What if an Item in the Sprint Backlog cannot be finished by Developer?

- Developers work with PO to **RENEGOTIATE** the specific Backlog Item from the Product Backlog/Sprint Backlog
- Developers may **REPLACE** the Backlog Item with another Item that can help them reach the Sprint Goal
- **COLLABORATE with PO** and discuss on the next steps as PO makes the final decision
- **INFORM the PO** about the situation

SPRINT GOAL

What is the Sprint Goal?

- **SINGLE OBJECTIVE** created by **ENTIRE** Scrum Team to achieve Sprint
- Provides Developers **GUIDANCE** on **WHY** they are building Increment
- Sprint Goal should be inspected as **FREQUENTLY** as possible

When is SPRINT GOAL created?

- Sprint Planning

INCREMENT

What is the **Increment**? Aka Product Increment

- Increment is a stepping stone towards the Product Goal and additive to all **PRIOR** Increments which integrates successfully
- **SUM** of all the Product Backlog items completed during the Sprint and the **VALUE** of the increments of all **PREVIOUS** Sprints

Who **CREATES** an Increment?

- Developers

What is the Definition of Done?

- List of Criteria that **MUST** be met by each item to make your Product Increment releasable
- Formal description of the state of the Increment when it meets the quality measures required for the product

DoD

Who **CREATES** the Definition of Done?

- If DoD is an Organization Standard, then you follow at minimum
- If no Standard then, **Whole Scrum Team** creates the DoD

When is DoD **ADAPTED** or **CHANGED**?

- Sprint Retrospective

What are **CHARACTERISTICS** of DoD?

- Increases **TRANSPARENCY**
- Guides Developers during Sprint Planning in forecasting the work

- It can be convention within the Development Organization
- Increment is considered Done once its ready for release to End Users
- Ensures Artifact Transparency
- DoD is used to assess when work is complete on the Product Increment

How does DoD help the Scrum Team?

- DoD is used to assess when work is complete on the Product Increment
- DoD guides the Development Team in knowing how many Product Backlog items it can select during a Sprint Planning
- DoD ensures Artifact Transparency

What is EBM Evidence Based Management?

- EBM is FRAMEWORK Organizations use to help them Measure, manage, and increase VALUE they derive from their Product Delivery.

What are KVAs Key Value Areas?

- Measures the value a Product has delivered to the Customer or User **TODAY**
- (Ex: Current Value, Time to Market, Unrealized Value, Ability to Innovate)

What are KVMs Key Value Measures?

- Specific Metrics or Measurements that exists within KVA categories
- (Ex: Revenue per Employee, Customer Satisfaction, Customer Usage Index, Employee Satisfaction, Defects, etc.)

What is the Scaled Scrum?

- MULTIPLE Scrum Teams work together to create a Single Product
- 1 Product = 1 Product Backlog = 1 Product Owner

SCALED SCRUM

- Scrum Teams must have a same SHARED Definition of Done

When many Scrum Teams are working on the **SAME** product, should **ALL** of their Increments be **INTEGRATED** every Sprint?

- Yes, otherwise the Product owner may not be able to accurately inspect what is Done

What is Nexus Team?

- Nexus is a group of 3-9 Scrum Teams that work together to deliver a single product with a single Product Owner
- Multiple Scrum Teams may require a Nexus Team to INTEGRATE Increments

BURN DOWN

What is the BurnDOWN Chart?

- Burndown Chart is a graphical interface that calculates the AMOUNT OF WORK **REMAINING** to complete the Product
- **NOT MANDATORY** (optional)