# Characteristics of a Great Scrum Team

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## Characteristics of a Great Scrum Team

Scrum is a framework within which people can address complex problems, and productively and creatively develop products of the highest possible value [1]. It's a tool organizations can use to increase their agility.

Within Scrum self-organizing, cross-functional, and highly productive teams do the work: creating valuable releasable increments. Hereby Scrum offers a framework that catalyzes the teams learning through discovery, collaboration and experimentation.

A great Scrum Team consists of a Product Owner that maximizes value, a Scrum Master that enables continuous improvement and a Development Team that focuses on delivering high quality increments.

For sure this sounds great!

But what are the characteristics of such a great Scrum team? This white paper will answer that question. It offers a detailed description of the characteristics and skills of a great Product Owner, Scrum Master and Development Team.

If you know any other characteristics of a great Scrum team, feel free to share them with me at b.overeem@prowareness.nl.

## The Product Owner

The Product Owner is responsible for maximizing the value of the product and the work of the Development Team. It's a one-person player role that brings the business perspective of the software product to a Scrum Team [2].

The Product Owner is responsible for:
- Developing and maintaining a product vision and market strategy;
- Product management;
- Ordering and managing the Product Backlog;
- Involving stakeholders and end-users in Product Backlog; refinement and backlog management;
- Alignment with other Product Owners when needed from an overall product, company or customer perspective.

## A Great Product Owner...

- **Embraces the product vision.** A great Product Owner represents the customers voice and creates a product vision together with the stakeholders. Every decision is taken with the product vision in mind. This ensures sustainable product development, provides clarity for the development team and increases the chances of product success drastically.

- **Exceeds the customer's expectation.** A great Product Owner truly understands the customer's intentions and goals with the product and is able to outstrip its expectations. Customer delight is the ultimate goal!

- **Is empowered.** A great Product Owner is empowered to take decisions related to the product. Sure, creating support for his decisions might take some time, but swiftly taking important decisions is a primary condition for a sustainable pace of the development team.

- **Orders the product backlog.** A great Product Owner understands that the product backlog should be ordered. Hereby priority, risk, value, learning opportunities and dependencies are balanced with each other.

- **Prefers face-to-face communication.** A great Product Owner understands that the best way to convey information is face-to-face communication. User stories are explained in a personal conversation. If a tool is used for backlog management, its function is to support the dialogue. It never replaces the good old-fashioned conversation.

- **Knows business models.** A great Product Owner has a backpack full of valuable business models. He knows when to apply a specific model. Examples are Business Model Generation, Lean Startup or Impact Mapping. Based on these models he knows how to drive product success.

- **Shares experiences.** A great Product Owner shares his experiences with peers. This might be within the organization, but also seminars and conferences are a great way to share experiences and gather knowledge. Of course writing down your lessons learned is also highly appreciated.

- **Owns user story mapping.** A great Product Owner should master the concept of user story mapping. It's a technique that allows you to add a second dimension to your backlog. The visualization enables you to see the big picture of the product backlog. Logically he should also know all the stuff Jeff Patton has created.

- **Has a focus on functionality.** A great Product Owner has a focus on functionality, hours or even story points are less important. The goal of the Product Owner is to maximize value for the customer. It's the functionality that has value; therefore this is the main focus for the Product Owner.

- **Is knowledgeable.** A great Product Owner has in depth functional product knowledge and understands the technical composition. For large products it might be difficult to understand all the details, but the Product Owner should always know the larger pieces of the puzzle and hereby make conscious, solid decisions.

- **Understands the domain.** A great Product Owner understands the domain and environment he's part of. A product should always be build with its context taken into account. This includes understanding the organization it concerns but also being aware of the latest the market conditions. Shipping an awesome product after the window of opportunity is quite useless.

- **Acts on different levels.** A great Product Owner knows how to act on different levels. The most common way to define these levels is strategic, tactical and operational. A Product Owner should know how to explain the product strategy at board level, create support at middle management and motivate the development team with their daily challenges.

- **Is available.** A great Product Owner is available for the stakeholders, the customers, the development team and the Scrum Master. Important questions are answered

quickly and valuable information is provided on time. The Product Owner ensures his availability never blocks the progress of the development team.

- **Is able to say 'no'.** A great Product Owner knows how and when to say no. This is probably the most obvious one but nonetheless also the most difficult one to master. Saying yes to a new idea or feature is easy, it's just another item for the product backlog. However, good backlog management encompasses creating a manageable product backlog with items that probably will get realized. Adding items to the backlog knowing nothing will happen with them only creates 'waste' and false expectations.

- **Acts as an entrepreneur.** A great Product Owner basically is an entrepreneur for his product. He has a keen eye for opportunities, focuses on business value and the Return On Investment and acts proactive on possible risks and threats. Everything with the growth (size, quality, market share) of his product taken into account.

- **Uses the Backlog Prioritisation Quadrant** [3]. A great Product Owner is familiar with the Backlog Prioritisation Quadrant and uses this as an instrument to discuss the Product Backlog. The Backlog Prioritisation Quadrant clarifies the fact that the backlog consists of more than only new features. Technical innovation, technical debt and providing support should also be taken into account.

- **Takes Backlog Refinement seriously.** A great Product Owner spends enough time at refining the Product Backlog. Backlog Refinement is the act of adding detail, estimates and order to items in the Product Backlog. The advise is to spend on average 10% of the capacity of the Development Team to refinement, the way it is done isn't prescribed and is up to the team. The Product Owner can involve stakeholders and the Development Team with refining the backlog. The stakeholders because it gives them the opportunity to explain their wishes and desires. The Development Team because they can clarify functional and technical questions or implications. This will ensure common understanding and increases te quality of the Product Backlog considerably.

- **Has studied all the stuff from Roman Pichler.** A great Product Owner has read all the articles of Roman Pichler and uses his templates continuously. Creating a product

vision, roadmap, persona, canvas or sprint goal, the website of Roman Pichler is the place to be!

## The Scrum Master

The Scrum Master is responsible for ensuring Scrum is understood and enacted. Scrum Masters do this by ensuring that the Scrum Team adheres to Scrum theory, practices, and rules. The Scrum Master is a servant-leader for the Scrum Team. The Scrum Master helps those outside the Scrum Team understand which of their interactions with the Scrum Team are helpful and which aren't. The Scrum Master helps everyone change these interactions to maximize the value created by the Scrum Team.

The role of a Scrum Master is one of many stances and diversity. A great Scrum Master is aware of them and knows when and how to apply them, depending on situation and context. Everything with the purpose of helping people understand and apply the Scrum framework better.

The Scrum Master acts as a:
- **Servant Leader** whose focus is on the needs of the team members and those they serve (the customer), with the goal of achieving results in line with the organization's values, principles, and business objectives [4];
- **Facilitator** by setting the stage and providing clear boundaries in which the team can collaborate;
- **Coach** coaching the individual with a focus on mindset and behaviour, the team in continuous improvement and the organization in truly collaborating with the Scrum team;
- **Conflict navigator** to address unproductive attitudes and dysfunctional behaviors;
- **Manager** responsible for managing impediments, eliminate waste, managing the process, managing the team's health, managing the boundaries of self-organization, and managing the culture;
- **Mentor** that transfers agile knowledge and experience to the team;
- **Teacher** to ensure Scrum is understood and enacted.

### A Great Scrum Master...

- **Involves the team with setting up to process.** A great Scrum Master ensures the entire team supports the implemented Scrum process. The daily Scrum for example is planned at a time that suits all team members. A common complain about Scrum is the amount of 'meetings', involving the team with the planning of the events will prevent at least some resistance.

- **Understands team development.** A great Scrum Master is aware of the different phases a team will go through when working as a team. He understands Tuckman's [5] different stages of team development: forming, storming, norming, performing and adjourning. The importance of a stable team composition is therefore also clear.

- **Understands principles are more important than practices.** Without a solid, supported understanding of the agile principles, every implemented practice is basically useless. It's an empty shell. An in-depth understanding of the agile principles by everyone involved will increase the chances of successful usage of practices drastically.

- **Recognizes and acts on team conflict.** A great Scrum Master has read the book 'The 5 Dysfunctions of a Team' by Patrick Lencioni. He therefore recognizes team conflict in an early stage, can apply different activities to resolve it, and even better, he knows how to prevent conflict.

- **Dares to be disruptive.** A great Scrum Master understands some changes will only occur by being disruptive. He knows when it's necessary and is capable to be disruptive enough to enforce a change, but without causing irreparable damage.

- **Is aware of the smell of the place.** A great Scrum Master can have an impact on the culture of the organization so that the Scrum teams can really flourish. He therefore knows the movie 'The Smell of the Place [6]' by Prof. Sumantra Ghoshal and can also apply the related workshop.

- **Is both dispensable and wanted.** A great Scrum Master has supported the growth of teams in such a manner they don't need him anymore on daily basis. But due his proven contribution he will get asked for advice frequently. His role has changed from a daily coach and teacher to a periodical mentor and advisor.

- **Let his team fail (occasionally).** A great Scrum Master knows when to prevent the team from failing but also understands when he shouldn't prevent it. The lessons learned after a mistake might be more valuable than some good advice beforehand.

- **Encourages ownership.** A great Scrum Master encourages and coaches the team to take ownership of their process, task wall and environment.

- **Has read...** A great Scrum Master has read all the stuff produced by e.g. Geoff Watts, Lyssa Adkins, Tobias Mayer,

Henrik Kniberg, Growing Agile and Gunther Verheyen. Basically he knows whom to follow in his area of study.

- **Has studied...** A great Scrum Master has studied the Trello board [7] that Growing Agile has published. The Shu-Ha-Ri levels offer a very useful structure to a knowledge base for every Scrum Master.

- **Is RE-TRAINED.** A great Scrum Master recognizes himself in the acronym made up by Geoff Watts [8], RE-TRAINED:
  o **Resourceful**, is creative in removing impediments
  o **Enabling**, is passionate about helping others
  o **Tactful**, is diplomacy personified
  o **Respected**, has a reputation for integrity
  o **Alternative**, is prepared to promote a counter-culture
  o **Inspiring**, generates enthusiasm and energy in others
  o **Nurturing**, enjoys helping teams and individuals develop and grow
  o **Empathic**, is sensitive to those around them
  o **Disruptive**, breaks the status quo, helps create a new way of working

- **Has faith in self-organization.** A great Scrum Master understands the power of a self-organizing team. "Bring it to the team" is his daily motto. Attributes of self-organizing teams are that employees reduce their dependency on management and increase ownership of the work. Some examples are: they make their own decisions about their work, estimate their own work, have a strong willingness to cooperate and team members feel they are coming together to achieve a common purpose through release goals, sprint goals and team goals.

- **Values rhythm.** A great Scrum Master understands the value of a steady sprint rhythm and does everything to create and maintain it. The sprint rhythm should become the team's heartbeat, which doesn't cost any energy. Everyone knows the date, time and purpose of every Scrum event. They know what is expected and how to prepare. Therefore a complete focus on the content is possible.

- **Knows the power of silence.** A great Scrum Master knows how to truly listen and is comfortable with silence. Not talking, but listening. He is aware of the three levels of listening and knows how to use them. He listens carefully to what is said, but also to what isn't said.

- **Observes.** A great Scrum Master observes his team with their daily activities. He doesn't have an active role within every session. The daily Scrum for example is done by the team itself. He observes the session and

hereby has a more clear view to what is being discussed (and what isn't) and what everyone's role is during the standup.

- **Share experiences.** Great Scrum Masters share experiences with peers. This might be within the organization, but also seminars and conferences are a great way to share experiences and gather knowledge. Of course writing down your lessons learned is also highly appreciated. And yes, for the attentive readers, this is exactly the same as for the Product Owner and the Development Team.

- **Has a backpack full of different retrospective formats.** A great Scrum Master can apply lots of different retrospective format. This ensures the retrospective will be a fun and useful event for the team. He knows what format is most suitable given the team's situation. Even better: he supports the team by hosting their own retrospective. To improve involvement this is an absolute winner!

- **Can coach professionally.** A great Scrum Master understands the power of professional coaching and has mastered this area of study. Books like Coaching Agile Teams and Co-Active Coaching don't have any secrets for him. He knows how to guide without prescribing. He can close the gap between thinking about doing and actually doing. And he can help the team members understand themselves better so they can find news ways to make the most of their potential. And yes, these last sentences are actually an aggregation of several coaching definitions, but it's sounds quite cool!

- **Has influence at organizational level.** A great Scrum Master knows how to motivate and influence at tactic and strategic level. Some of the most difficult impediments a team will face occur at these levels; therefore it's important a Scrum Master knows how to act at the different levels within an organization.

- **Prevent impediments.** A great Scrum Master not only resolves impediments, he prevents them. Due his experiences he is able to 'read' situations and hereby act on them proactively.

- **Isn't noticed.** A great Scrum Master isn't always actively present. He doesn't disturb the team unnecessary and supports the team in getting into the desired 'flow'. But when the team needs him, he's always directly available.

- **Forms a great duo with the Product Owner.** A great Scrum Master has an outstanding partnership with the Product Owner. Although their interest are different, the Product Owner 'pushes' the team, the Scrum Master protects the team. A solid partnership is extremely

valuable for the Development Team. Together they can build the foundation for astonishing results.

- **Allows leadership to thrive.** A great Scrum Master allows leadership within the team to thrive and sees this as a success of their coaching style. They believe in the motto "leadership isn't just a title, it's an attitude". And it's an attitude everyone in the team can apply.

- **Is familiar with gamification.** A great Scrum Master is able to use the concepts of game thinking and game mechanics to engage users in solving problems and increase users' contribution.

- **Understands there's more than just Scrum.** A great Scrum Master is also competent with XP, Kanban and Lean. He knows the strengths, weaknesses, opportunities and risks of every method/framework/principle and how & when to use them. He tries to understand what a team wants to achieve and helps them become more effective in an agile context.

- **Leads by example.** A great Scrum Master is someone that team members want to follow. He does this by inspiring them to unleash their inner potential and showing them the desired behavior. At difficult times, he shows them how to act on it; he doesn't panic, stays calm and helps the team find the solution. Therefore a great Scrum Master should have some resemblance of Gandalf. The beard might be a good starting point :)

- **Is a born facilitator.** A great Scrum Master has facilitation as his second nature. All the Scrum events are a joy to attend, and every other meeting is well prepared, useful and fun, and has a clear outcome and purpose.

# The Development Team

The Development Team consists of professionals who do the work of delivering a potentially releasable Increment of "Done" product at the end of each Sprint. Only members of the Development Team create the Increment. Development Teams are structured and empowered by the organization to organize and manage their own work. The resulting synergy optimizes the Development Team's overall efficiency and effectiveness.

Development Teams have the following characteristics:
- They are self-organizing. No one (not even the Scrum Master) tells the Development Team how to turn Product Backlog into Increments of potentially releasable functionality;
- Development Teams are cross-functional, with all of the skills as a team necessary to create a product Increment;
- Scrum recognizes no titles for Development Team members other than Developer, regardless of the work being performed by the person; there are no exceptions to this rule;
- Scrum recognizes no sub-teams in the Development Team, regardless of particular domains that need to be addressed like testing or business analysis; there are no exceptions to this rule; and,
- Individual Development Team members may have specialized skills and areas of focus, but accountability belongs to the Development Team as a whole [9].

## A Great Development Team…

- **Pursues technical excellence.** Great Development Teams use Extreme Programming hereby as a source of inspiration. XP provides practices and rules that revolve around planning, designing, coding and testing. Examples are refactoring (continuously streamlining the code), pair programming, continuous integration (programmers merge their code into a code baseline whenever they have a clean build that has passed the unit tests), unit testing (testing code at development level) and acceptance testing (establishing specific acceptance tests).

- **Applies team swarming.** Great Development Teams master the concept of 'team swarming'. This is a method of working where a team works on just a few items at a time, preferably even one item at a time. Each item is finished as quickly as possible by having many people work on it together, rather than having a series of handoffs.

- **Uses spike solutions.** Great Development Teams use spike solutions to solve challenging technical, architectural or design problems.

- **Refines the product backlog as a team.** Great Development Teams consider backlog refinement a team effort. They understand that the quality of the product backlog is the foundation for a sustainable development pace. Although the Product Owner is responsible for the product backlog, it's up to the entire team to refine it.

- **Respects the Boy Scout Rule.** Great Development Teams use the Boy Scout Rule: always leave the campground cleaner than you found it. This means they always check a module in cleaner than it was before.

- **Criticizes ideas, not people.** Great Development Teams criticize ideas, not people. Period.

- **Shares experiences.** Great Development Teams share experiences with peers. This might be within the organization, but also seminars and conferences are a great way to share experiences and gather knowledge. Of course writing down your lessons learned is also highly appreciated. And yes, for the attentive readers, this is exactly the same as for the Product Owner.

- **Understands the importance of having some slack.** Great Development Teams have some slack within their sprint. Human beings can't be productive all day long. They need time to relax, have a chat at the coffee machine or play table football. They need some slack to be innovative and creative. They need time to have some fun. By doing so, they ensure high motivation and hereby maximum productivity. But slack is also necessary to handle emergencies that might arise; you don't want your entire sprint to get into trouble when you need to create a hot-fix. Therefore: create some slack! And when the sprint doesn't contain any emergencies: great! This gives the team the opportunity for some refactoring and emergent design. It's a win-win!

- **Has fun with each other.** Great Development Teams ensure a healthy dose of fun is present every day. Fostering fun, energy, interaction and collaboration creates an atmosphere in which team will flourish!

- **Don't have any Scrum 'meetings'.** Great Development Teams consider the Scrum events as opportunities for conversations. Tobias Mayer describes this perfectly in his book 'The Peoples Scrum': "Scrum is centered on people, and people have conversations. There are conversations to plan, align, and to reflect. We have these conversations at the appropriate times, and for the appropriate durations in order to inform our work. If we don't have these conversations, we won't know what we are doing (planning), we won't know where we are going

(alignment), and we'll keep repeating the same mistakes (reflection)."

- **Knows their customer.** Great Development Teams know their real customer. They are in direct contact with them. They truly understand what they desire and are therefore able to make the right (technical) decisions.

- **Can explain the (business) value of technical tasks.** Great Development Teams understand the importance for technical tasks like e.g. performance, security and scalability. They can explain the (business) value to their Product Owner and customer and hereby ensure its part of the product backlog.

- **Trusts each other.** Great Development Teams trust each other. Yes, this is obvious. But without trust it's impossible for a team to achieve greatness.

- **Keeps the retrospective fun.** Great Development Teams think of retrospective formats themselves. They support the Scrum Master with creative, fun and useful formats and offer to facilitate the sessions themselves.

- **Delivers features during the sprint.** Great Development Teams deliver features continuously. Basically they don't need sprints anymore. Feedback is gathered and processed whenever an item is 'done'; this creates a flow of continuous delivery.

- **Don't need a sprint 0.** Great Development Teams don't need a sprint 0 before the 'real' sprints start. They already deliver business value in the first sprint.

- **Acts truly cross-functional.** Great Development Teams not only have a cross-functional composition but also really act cross-functional. They don't talk about different roles within the team but are focused to deliver a releasable product each sprint as a team. Everyone is doing the stuff that's necessary to achieve the sprint goal.

- **Updates the Scrum board themselves.** Great Development Teams ensure the Scrum/team board is always up-to-date. It's an accurate reflection of the reality. They don't need a Scrum Master to encourage them; instead they collaborate with the Scrum Master to update the board.

- **Spends time on innovation.** Great Development Teams understand the importance of technical/architectural innovation. They know it's necessary to keep up with the rapidly changing environment and technology. They ensure they have time for innovation during regular working hours, and that it's fun and exciting!

- **Don't need a Definition of Done.** Great Development Teams deeply understand what 'done' means for them. For the team members, writing down the Definition of Done isn't necessary anymore. They know. The only reason to use it is to make the 'done state' transparent for their stakeholders.

- **Knows how to give feedback.** Great Development Teams have learned how to give each other feedback in an honest and respectful manner. They grasp the concept of 'impact feedback'. They give feedback whenever it's necessary, and don't postpone feedback until the retrospective.

- **Manages their team composition.** Great Development Teams manage their own team composition. Whenever specific skills are necessary, they collaborate with other teams to discuss the opportunities of 'hiring' specific skills.

- **Practices collective ownership.** Great Development Teams understand the importance of collective ownership. Therefore they rotate developers across different modules of the used applications and systems to encourage collective ownership.

- **Fixes dependencies with other teams.** Great Development Teams are aware of possible dependencies with other teams and manage these by themselves. Hereby they ensure a sustainable development pace of the product.

- **Don't need story points.** Great Development Teams don't focus on story points anymore. They've refined the product backlog in such a manner, the size for the top items don't vary much. They know how many items they can realize each sprint. Counting the number of stories is enough for them.

# References

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