# PROFESSIONALISING THE SCRUM MASTER ROLE

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The global pump manufacturer Grundfos is experimenting with implementing Agile techniques for the development of hardware and software components. This article describes how the authors guided and supported the professional development of the Scrum Masters role and competencies, with an emphasis on challenges encountered and lessons learned.

## 1. INTRODUCTION

In our work with organisations adopting Agile and Scrum into their ways of working, we have observed, that especially the Scrum Master role, has a hard time gaining a foothold. The Scrum Master role is often not fully understood and recognised in organisations, and there can be a tendency to see it as a facilitator of Scrum as well as a role that you can do part-time or even avoid having.

About us: Jan B. Olsen has experience with strategic and operational consultancy within complex and challenging organisations. The later engagements have been with Danske Bank's reorganisation of its development organisation; and are now supporting Grundfos' ambition to become more innovative, customer-centric and a great place to work. Heine Alsaker has a background as a (Software) Project Manager combined with experiences as an Agile team coach in mechanical production organisations. In these organisations, he has held different Scrum and SAFe related roles. He is currently holding an Agile Coach role supporting Grundfos' Agile journey.

In general, there is a gap in the understanding of the need for the Scrum Master, as there is a lack of focus on building the Scrum Master competencies to support and challenge the organisation, based on its current maturity level. On top of this comes the leadership role the Scrum Master takes [1], which is new, and maybe not even expected, by most Scrum Masters.

As you can't eat the elephant in a single bite, you should establish steps towards the desired level of agility in the organisation. That way, the organisation can see the desired end-goal and at the same time, make the journey toward the goal more understandable, shareable, and focused.

This also enables the Scrum Masters to know where to focus their effort, giving them clear, tangible, and communicable targets for change, making the actions understandable and visible to the rest of the organisation.

With the understanding of what needs to change in the organisation, we can focus on the competencies and leadership traits needed to be developed by the Scrum Masters.

The overall target of the role is to support and challenge the organisation as it matures throughout its journey. Here the Scrum Master plays a vital role in guiding the organisation on the new paths needed to succeed. Therefore, we set out to professionalise and create trustworthiness for the Scrum Master role in Grundfos.

## 2. BACKGROUND

Grundfos is a mature, leading global pump manufacturer headquartered in Bjerringbro, Denmark. Founded in 1945 by Poul Due Jensen and owned by the Grundfos Foundation, the employees and the founder's family, with the Foundation being the primary owner. Sustainability is at the core of Grundfos, which the product portfolio also reflects; it provides drinking water for the smallest villages and the highest skyscrapers, treats, and removes waste water and brings heat and comfort to people worldwide.

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As of 2022, Grundfos is represented by more than 100 companies in more than 60 countries and, in addition, products are sold in a larger number of countries by local distributors. Grundfos has approximately 19,000 employees across the globe. Grundfos develops and produces approximately 15 million pumps yearly.

Like many businesses, pump manufacturing is being met with an increasingly volatile market which requires a need for higher innovation rate and a quicker adaptability rate. For satisfying these requirements, Grundfos has initiated several initiatives, hereby embarking on an Agile journey.

The first large-scale Agile experiments started in the software areas and have spread into physical product development, as well as into some administrative areas. A high number (100+) of primarily Scrum teams have been established during this journey.

Compared to most Agile transformations, the submission of Scrum and Agile techniques to work that involved mechanical and electrical engineering is extra challenging. As Grundfos is implementing Agile approaches like Scrum in non-software environments there cannot be a "by the book" implementation. Scrum teams must for example find out what a valid Sprint Goal is when they cannot produce potential releasable product increments. They need to adapt to an environment with lead-times of 6 or more weeks from suppliers. This calls for Scrum Masters competences to not only implement vanilla Scrum but also help Scrum teams to do alternative implementations due to these constraints.


3.   OUR STORY

One year into Grundfos' Agile transformation journey, it is clear that the Scrum Master narrative and purpose of the Scrum Master role need strengthening, as the role is not fully recognised by the organisation. To do so, the credibility of the role needs to be strengthened, which happens by ensuring the professional development of the Scrum Masters in accordance with the needs of the organisation.

In the following sections, we will describe and elaborate on the challenges, how we chose to resolve them, and the result of our efforts.

When this text was written, we had been working with the results of the first learnings for approx. three months.


3.1   Problems

In Grundfos, just like in most organisations, the Scrum Master role is described based upon the Scrum Guide [1], but the effort taken to establish a shared narrative and expectation of the role is limited. This makes it hard for the organisation to understand the value of the Scrum Master role.

The people who have risen to the occasion and taken on the role of Scrum Master to support Grundfos' Agile transformation journey have had limited training and less access to inspiration from others, as Agile in physical product development environments is still immature. Therefore, one year into the transformation there is an acknowledgement that the credibility of the Scrum Masters needs to be improved by developing their competencies.

Here are some anti-pattern examples which created the challenges we observed:

- Scrum Masters have been promoted.
  In the process of establishing this high number of teams, most of the Scrum Masters were promoted to this role without fully understanding how to act as a Scrum Master as training wasn't provided until afterwards.
- The Scrum Master role is not uniformly understood in the organisation.
  As part of the reorganisation, old roles disappeared and new roles emerged, for example, the Scrum Master role. For handling this, several role descriptions have been made. Even with these role descriptions, the roles are being interpreted in varying ways across the organisation.
- Scrum Masters name themselves Scrum Masters, while acting as Project Managers.
  The "push" from the organisation is still dominant. Managing projects and deadlines often holds more importance than working as a servant leader for the team or for implementing an agile mindset. We are seeing Scrum Masters and teams focusing very much on getting "stuff done" and only having a limited focus on "sharpening the saw".

- Regression.
  When the organisation gets pressured or cannot find an alternative way to handle challenges, it has a tendency to regress back to a default behaviour which has not developed according to the desired behaviour.

As a result, there is a need to professionalise the Scrum Masters' role and make the responsibilities and expectations of the role more transparent, both to support the development of the Scrum Master as well as the organisation. Therefore, we see the need for a tailored development of the Scrum Masters that match the context and maturity of the organisation so the necessary credibility and value are achieved.

The question then became how to develop the competencies so they would have the biggest impact on the organisation.

## 3.2   What we did

We sought to support the missing narrative around the Scrum Master role and to ensure the credibility and value of the role towards the organisation. We defined the purpose of the Scrum Master role and highlighted and developed competencies which would assist the organisation to mature toward its desire of becoming more innovative, customer-centric and employee empowered.

**Narrative.** The role of the Scrum Master was defined as part of a change initiative a year ago that targeted a simpler and more adaptable organisation, but the definition has not been revised since the initial definition of the role.

Documenting the definition or description of a role is seldom enough, and our experience also supports this, as the existing definition was not very well-known and used. This time around, we took another approach, in which we still created the framing for the role based on our observations, but we also involved management, multiple Scrum Masters and HR in an effort to understand what focus was needed to challenge and support the organisation to reach its desired goals.

Through a series of workshops and sessions, we worked on the narrative for the role and how to make it understood by the organisation. The Scrum Guide helped us frame the role with a focus on the team and its Product Owner, the organisation impacting the team, as well as leadership. In addition, we looked at Daniel Kahneman and his work on System 1 and System 2, as this would help create the necessary narrative around continuous change regression and how the Scrum Master can support the organisation and its people to create new patterns.

The interactions led to an HR anchored job description for the Scrum Masters, which was supported by the HR leaders and by management. Most important was the dialogue, as it created a strong and shared narrative.

**Competency development.** As mentioned above, part of the challenge was the uncertainty of competencies needed by the Scrum Masters in their role. To focus on the development of the role, we needed to structure the competencies, as a structure makes it possible to focus on the development. At the same time, we needed to make sure that the structure did not limit development.

We found inspiration in the Agile Coaching Competency Framework [4], which originally was developed by Lyssa Adkins & Michael Spayd, and today is being further developed by a workgroup at Scrum Alliance.

The Agile Coaching Competency Framework describes the foundation as Agile and Lean practices, which can be delivered by different stances of teaching, mentoring, professional coaching and facilitating, with the potential to focus on mastery in the form of technical, business or transformation.
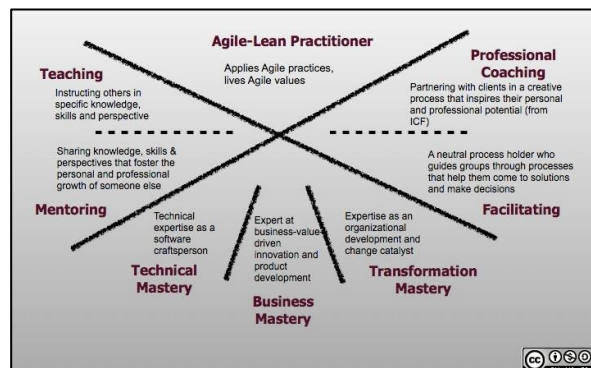


Figure 1. **Agile Coaching Competency Framework**

The Agile Coaching Competency Framework is developed with Agile Coaches in focus, but, as mentioned above, we have been inspired by the framework and have identified the primary necessary focus for the Scrum Masters, in our context, to be the foundation (Agile-Lean Practitioner) and stances (Teaching, Mentoring, Professional Coaching and Facilitating).

Because there are various levels of skill found within each competency, for example, facilitation can be anything from facilitating a well-known team event to facilitating a significant company event or resolving a conflict, we saw a need to differentiate between the levels of knowledge within the specific competencies. This would help to highlight the areas that needed focus, and show the areas where we, as a collective whole, were already shining.

To do so, we drew inspiration from Dreyfus' Five-Stage Model [5] which focuses on how new skills are acquired. What we added for our purposes are descriptions of the level of competency held at each stage, so the Scrum Masters know what is expected of them at every stage along the way.

The stages as described in the model are:

- Novice - if the person has never studied the competency before and has no idea how to do it.
- Advanced Beginner - when the person has learned the basic rules of the competency.
- Competent - when the person is not just blindly following rules, but is getting a better grip on when, where and how to apply the competency.
- Proficient - when the person knows what to do in the situation.
- Expert - when the person is someone who acts according to intuition.

Creating stages for the competencies better allowed us to create a shared understanding of how competencies should be grown based on the current competency stages, also allowing us to provide better inspiration for the development of the competency, either self-paced or instructor based.

| | Novice | Advanced beginner | Competent | Proficient | Expert |
|---|---|---|---|---|---|
| Agile – Lean | | | ◆ | | |
| Facilitation | | ◆ | | | |
| Teaching | ◆ | | | | |
| Professional Coaching | | ◆ | | | |
| Mentoring | ◆ | | | | |
| Technical Mastery | ◆ | | | | |
| Business Mastery | ◆ | | | | |
| Transformation Mastery | ◆ | | | | |

Figure 2. **Scrum Master Competency Focus**

This will give the Scrum Masters a clearer understanding of their role and the expectations to it and start the necessary dialogue regarding competency development.

But which competencies should get the biggest awareness from the Scrum Master, and which competency gaps should be closed first to support and challenge the organisation in the best way?

**Organisational Maturity.** It was clear that we needed to understand the organisation's needs to avoid misalignment between the Scrum Masters' development and the organisation's need to mature and grow. Doing so would enable the Scrum Master to focus their energy as needed by the organisation, as well as minimise any self-orientation.

We investigated the existing knowledge and literature to find inspiration and learning. We did not find any models that provided the perfect fit, but we were greatly inspired by some existing work. We were heavily inspired by The Agile Fluency Model [2], and Scrum Master focus over time, as described in Large Scale Scrum [3]. The models describe how the focus needs to shift over the course of time during the organisational change.

To cater for this, we established a four-step maturity model for the organisation. In this model, we have mapped the current state of the agile maturity level to understand what is needed to mature the organisation further. The steps allow the organisation to focus its change efforts and to understand what is needed to mature through each step. This again enables the organisation to focus its efforts, as it fosters the understanding that the entire organisation cannot be changed with the flick of a finger, but instead by slicing

the change into smaller pieces that can be executed easier by the Scrum Masters and understood and communicated to the organisation.
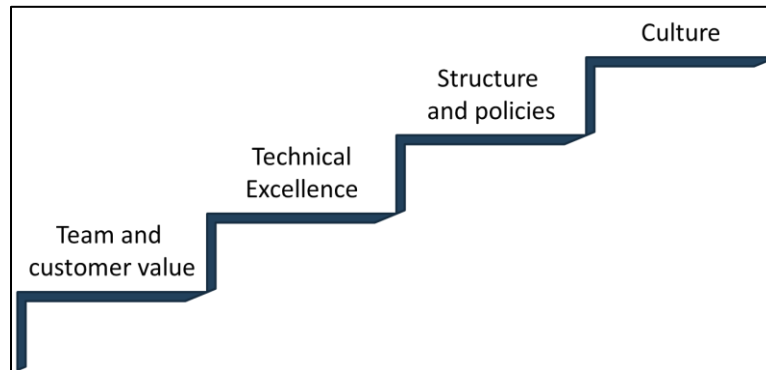


Figure 3. **Organisational Maturity**

Steps:
- Team and customer value – focusing on stable self-managed teams with the ability to deliver shippable increments within an end-to-end responsibility of a value stream. Establish sufficient business domain knowledge for the teams to pivot efforts based on customer value.
- Technical excellence – focusing on technical enablers to increase productivity supporting the ability to continuously deliver.
- Structure and policies – focusing on organisational policies and structures that are hindering effectiveness in value streams and inside the teams.
- Culture – focusing on lasting growth mindset and habits that have not already changed as an effect of maturity development. Most need to see proof from earlier maturity steps before they are fully committed to changing the culture.

Currently, the organisation is primarily located on the first step where a focus on creating teams around value streams with a customer focus is ongoing.

We understand the Agile Fluency Model is not a maturity model. What it provides to us is an understanding that investment and focus is needed to reach a particular level, giving the organisation insight into what is necessary to get to that point as well as an understanding of what is needed to mature further.

We are also aware that the later steps in the model will most likely change as the organisation develops its maturity.

**Alignment between competencies and organisational needs.** By knowing which competencies the Scrum Masters need to develop and understanding the needs of the organisation, we are now able to help Scrum Master focus their competency development and, at the same time, highlight to the surrounding organisation why the Scrum Masters are focusing as they are. This removes misalignment between the focus of closing competency gaps with what the organisation is in need of to mature.

Initially the two first maturity steps, Team and customer value and Technical excellence, have been mapped with the necessary level of competency. As the maturity of both the organisation and the Scrum Masters will be high in the last two maturity steps, there is not a defined development path for the Scrum Master, but multiple development paths that split up into the three mastery competencies.
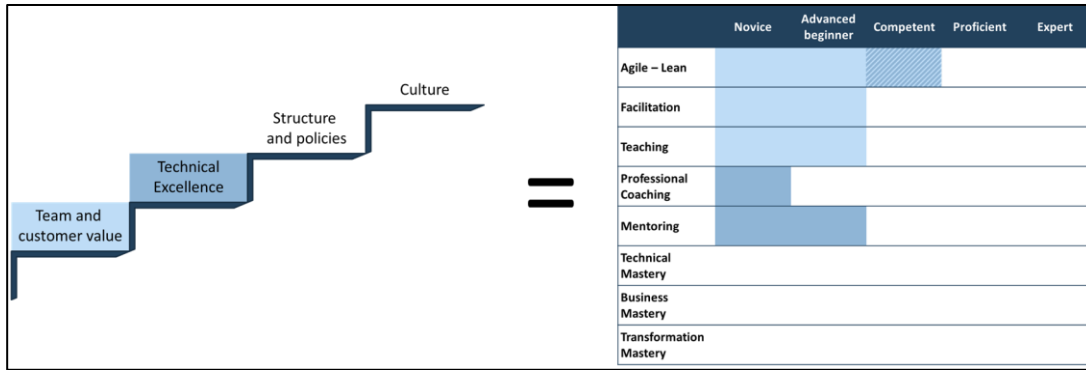
| | Novice | Advanced beginner | Competent | Proficient | Expert |
|---|---|---|---|---|---|
| Agile – Lean | | | | | |
| Facilitation | | | | | |
| Teaching | | | | | |
| Professional Coaching | | | | | |
| Mentoring | | | | | |
| Technical Mastery | | | | | |
| Business Mastery | | | | | |
| Transformation Mastery | | | | | |

Figure 4. **Alignment between competencies and maturity**

**Understanding the baseline.** With a model in place to support the organisational focus and the competency development of the Scrum Masters, the next step was to understand the current situation, enabling us to understand the gap towards the desired situation.

This was done by running self-assessment workshops with the Scrum Masters, which provided the necessary information to establish improvement actions.
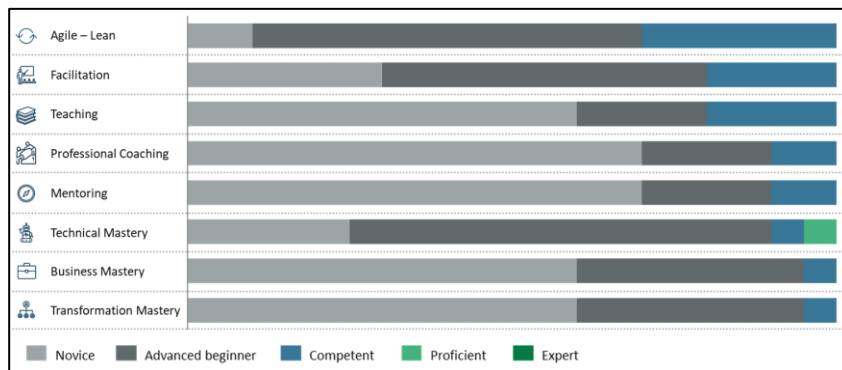


Figure 5. **Scrum Master Competencies**

Based on the results of the self-assessment, together with the observations from the workshops, we were able to set up actions that would close the competency gaps toward meeting the needs of the organisation.

The focus would first be on the development of the Agile-Lean Practitioner competencies, as this shows the highest gap compared with expectations. To close the gap, the following actions were established.

- Global environment - Establishing Masterclasses around a community of practise, where competencies can be developed, and learnings shared.
- Near environment - Helping groups of Scrum Masters in business units establish a continuous forum for learning that can be further shaped to their specific context.
- HR - Formalise the role of Scrum Master in the HR system and ensure that the work fits in with formal processes, such as performance appraisals.
- Capability Managers - Have the HR responsibility for the Scrum Masters, so they need to be familiarised with this work, as they need to support it in the development of the Scrum Master role.

The first two are directly related to growing the competencies of the Scrum Masters and establishing a community feeling, whereas the remaining two actions are related to establishing and ensuring anchoring of the role internally.

We will share further details on our actions and the impact the work has had in the next section.

## 3.3    Results

We will, in this section, focus on the results of what we did, and then gather our reflections and learnings in the following section: "What We Learned".

The overall result gave the Scrum Masters a clearer understanding of their own role, providing them with direction and a shared narrative. It also allows them to focus their effort instead of trying to swallow the entire change in one bite. Before this initiative, most of the Scrum Masters had not reflected deeply on what competencies were needed or how they should further develop them.

However, with managerial support, shown on multiple occasions in which management highlights the importance of the Scrum Master role in achieving the desired changes, the expectations of the Scrum Masters have been secured, as well as management's understanding that the focus will shift based on the maturity development of the organisation.

The results of working with this initiative can be grouped as tracks around the actions that were made as a result of the self-assessment, as described in the previous section. – Community (global and near environment), Support [HR and Capability Managers (HR leaders of Scrum Masters)]. Additionally, we have a track for maintaining and refining the model.

**Community.** The dialogues and interactions clearly showed the need to establish a strong community, as this would allow for further strengthening of the role and the shared narrative. For this purpose, a Global Scrum Master Community of Practice was established, as it creates a safe space to meet, share and learn. To help close the competency gaps more actively, masterclasses have also been established.

In the initial phase, we are the drivers of these actions, with the ambition of the community to be self-driven over time.

It has also resulted in more active and focused local communities on a Division level, where the Scrum Master continues their learnings within their own context. If more energy were put into this area, we expect it would have a significant impact, as learning would be stronger, and a strong local community would have better access to management in the Division.

**Support.** The continuous support and understanding of the value of the Scrum Masters from management results in curiosity about how to support the competency development from the Capability Managers. This is also backed by HR, who has taken ownership over the role description, also ensuring a career path for the Scrum Master. This supports the shared narrative and understanding of the role, both for the Scrum Masters themselves, but also for people in the organisation surrounding them.

The initiative is still very young, so additional support for establishing local communities and establishing dialogue concerning where the Scrum Masters' responsibilities has begun and is still being developed.


## 4.    WHAT WE LEARNED

Growing and developing one's own competencies is, in most cases, unstructured and tends to have a focus on training without understanding which competencies should be developed and how. There is also a tendency to neglect this development as it gets down prioritised in daily tasks and busyness.

For professional development to have meaningful value, it needs to have a lasting impact.

It absolutely makes sense to gain inspiration from specific training from time to time, but if the new knowledge is not integrated into the system, you are part of, it has diminishing value and impact, and if it is not what the system needs in order to mature, it has absolutely no value or impact.

The most valuable part of this work has been to start the dialogue and make visible the value of the role across the organisation. This can be accomplished by focusing on developing an active community. We know it takes a lot of time, focus and energy to successfully get a community up and running. This is something the organisation needs to invest further in, so that the sharing of experience and learning becomes second nature.

As previously mentioned, it is incredibly important to invite people into the work early. Failing to do so will create a much larger transitional gap, which will become harder to close later in the process. As an example this became obvious, as the Divisions we, Heine and Jan, were engaged with, had been informed earlier and therefore understood the benefit of the concept faster.

This late involvement also meant we, after the initial self-assessment, had to revisit the concept in the first Masterclass we provided. In general, the concept needs to be communicated over and over again to ensure it sticks and becomes natural.

We were initially missing the Capability Managers, who have the HR leadership over the Scrum Masters. This meant that they received an extremely hard takeoff to the concept, naturally making them sceptical. This

is an issue as they are there to support the development of the Scrum Masters, so their buy-in is of vital importance.

That being said, it is also a balance when it comes to speed versus consensus. We can involve every minor stakeholder in everything, or we can start rolling, and then accept changes and learning along the way. We were able to involve HR and test the concept within the first month, but the cost of further consensus could possibly have been too high. We will never know, as we are now beyond it, but our advice remains to maintain a balance.

When it comes to HR, it has been extremely beneficial to have them on board from the beginning, as they maintain ownership of the role afterwards, but more importantly support the organisation in the development of the employees.

The competency, Agile-Lean Practitioner, holds a large variation of approaches, techniques, and tools, which is the reason we have been discussing the possibility of opening it up with sub-competencies, so the dialogue and focus can be further supported. The reasoning behind not doing this at the start was the opportunity to observe the dialogue during the initial self-assessment to gain understanding of what the Scrum Masters themselves focused on within the competency. We have not fully decided if the competency should have sub-competencies yet.

When using Dreyfus for levelling the competencies, we found that most people had a hard time accepting the naming of the stages. For example, if not competent, there was a feeling of being labelled incompetent. Therefore, we will likely change the naming of the stages, excluding a number system, as that, for many, indicates that they should have a high-as-possible score.

Significant focus has been given to the competency part of the concept, which means that the organisational maturity dimension needs more focus and attention. As it will define the focus of the Scrum Masters, it is important that the majority of the organisation understands it, meaning that we still have a task to anchor it in the organisation.

We acknowledge that the concept needs continuous development and improvement, which demands support from the organisation, and, thankfully, this is something we have in our environment. It is far from a "fire and forget" implementation, ongoing attention is required to support its success.

There is a growing request from other job-roles for us to give them similar attention. At the moment, this is more than what our capacity allows for, but still confirming the work is needed and valuable to the organisation.

## 5. ACKNOWLEDGEMENTS

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