

An H-MOOC for Professional Scrum@Scale Training

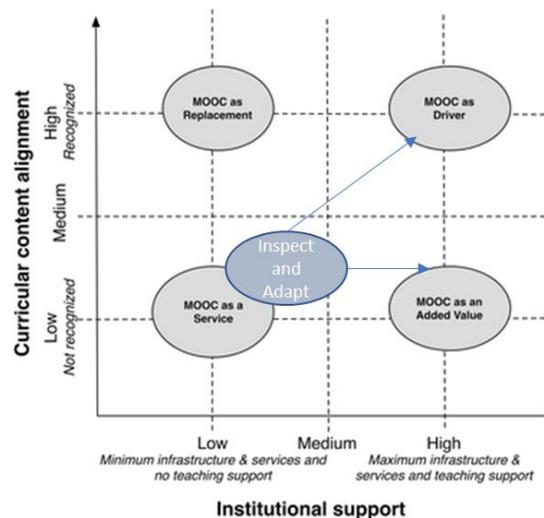
Background

Scrum is a simple yet incredibly powerful set of principles and practices that help teams deliver products in short cycles, enabling fast feedback, continual improvement, and rapid adaptation to change [1]. The Scrum Alliance® is a nonprofit association with certification offerings completed by more than 725,000 practitioners worldwide, primarily via experiential and project-based two-day face to face training (training). Scrum@Scale is a framework within which networks of Scrum teams can address complex adaptive problems, while creatively delivering products of the highest possible value [2]. Scrum@Scale has been deployed in multiple companies, with open source case studies showing radical reductions in decision latency [3].

The success of Scrum@Scale(S@S) at the corporate level depends on both Scrum training and Scrum@Scale training. The focus of Scrum training is to guide the application of Agile practices, principles, and values through a career-long certification path. The community of Scrum@Scale coaches and trainers focus on providing knowledge, skills, and experience that support transformations for both individuals and organizations. This extended abstract outlines our H-MOOC experimental design for a blended training practice for S@S with trials scheduled to run in May and June of 2018.

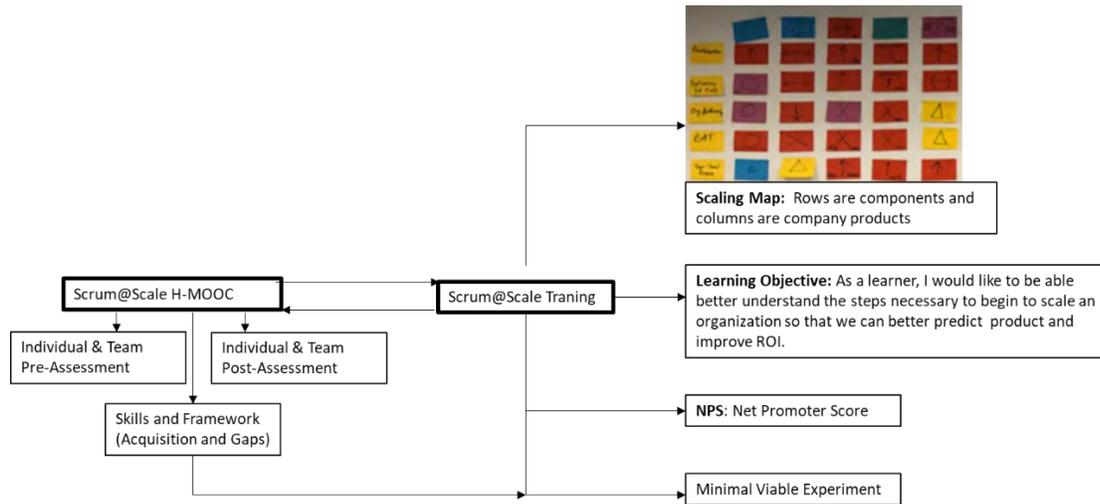
Adaptive H-MOOC Experimental Design

We attempt to design the smallest possible lean experiment on a critical part of the curriculum, designated as “Inspect and Adapt” in the H-MOOC framework diagram [4]. The ‘x-axis’ represents the institutional support needed to implement the initiative, and the ‘y-axis’ the alignment with the curricular content. In MOOC as a service, students take the MOOC voluntarily with no direct alignment with the content of any course in the curriculum. “Inspect and Adapt” is aligned with a single module in the S@S curriculum and designed for additional institutional support and curriculum alignment.



Our approach is adaptive in both the agile and the platform [5] sense of the word: Prior to taking the course we encourage learners to take an H-MOOC module online. This mini-module is aligned with a single module of training S@S course content and serves as a diagnostic of current skills and team state. The module also includes skill acquisition and review. Post training, the H-MOOC module serves as

review, a post-assessment from which learning gains can be measured and provides a rubric for teams to define an experiment to improve business outcomes. This is illustrated in the figure below:



Target Condition:

Our experimental goals are to measurably improve individual learning gains leading to a minimal viable experiment where the ultimate measure of success is the business outcome:

1. Gain an understanding of the state of the S@S practice for a single module by an individual. Enable inspection and adaption of the practice by a peer.
2. Improve the productivity of individuals through skills and framework training, measurable at the individual level through learning gains [6].
3. Measure impact on business outcomes.

Actual Condition:

Scrum at Scale is a two-day training model, with a curriculum separated into distinct modules. A primary output of the two-day class is a "scaling map". Every module covers (1) a role. e.g., Product Owner; (2) a set of artifacts to support the transformation, e.g., a product backlog; (3) a meeting whose function requires skills - e.g., to align, decompose, or refine a set of stories. The Scaling the Product Owner module covers the story: "As an Agile Executive, I need to understand how the PO role scales so that I can grasp how to satisfy the business' needs." After the completion of every module, individuals in the class are asked to assess the current state of scaling in their company. For the Scaling the Product Owner module, the learners are provided a rubric with which to assess their Executive MetaScrum meeting. This assessment identifies challenges that can be followed up on: e.g., Are executives dedicated to creating a company vision? If there is a strategic vision, how do products align to that vision? Do people have competing visions? Individuals assemble a column in the scaling map themselves; people attending from the same company are encouraged to discuss the columns on the scaling map together. The scaling map is the primary output of the training; It serves as the foundation for enabling a transformation, and the basis for a lean experiment.

There is a personalized output of Scrum@ Scale in-class training. At the beginning of the class, each individual is asked to write out their learning objective. At least four times during the training, the instructors check in to see if the individual learning objectives have been met.

The effectiveness of the training course is primarily measured via a written retrospective and Net Promoter Score. Ultimately, the impact of the course is measured in two ways:

1. Can the graduates produce an open source case study, and
2. Does the business itself achieve higher ROI post-implementation?

Obstacles:

In the experimental design, we require a platform [5] that supports S@S instructors online, infrastructure that supports the learners, and ultimately infrastructure that supports the company undergoing a S@S transformation. This is quite demanding for an initial experiment. However, we view the multi-sided network effects [7] as critical to the growth of Scrum@Scale.

Next Steps:

Our goal is to run these experiments in May and June. The Instruments we are developing includes:

1. H-Mooc General Learner Survey [8]
2. Learning Gain analysis based on Pre and post Module Assessments [6]
3. Correlation to internal company performance metrics

We are developing two Curriculum Components that generate multi-sided network effects:

1. Rubric for review by peers in training [9]
2. Case Study of lean experimental design by a graduate and with rubric for company participation

Although the first run of the course will only utilize the infrastructure to measure learning gains, we plan to introduce an Adaptive H-MOOC in the second run of the course based on project ALOSI[6].

References

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