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Media informatics

Exposé for a bachelor thesis

Investigating the practice-theory gap of scrum

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Tags

agility, scrum, practice and theory, frameworks, self-organization, trust, flexibility

Motivation and problems to solve

Experts state that agile is the best way to develop software.

Small Companies are using it, for example, lean start-ups, and are highly effective.

Chaos-Report states that 80 percent of software projects fail.

Agile should solve this problem.

SCRUM is the most known agile framework.

In theory, SCRUM is made for small teams, therefore not optimized for larger companies.

How to solve this problem or the problems is the goal of this dissertation.

Status Quo

17 software development experts wrote the agile manifesto and two of them developed the scrum guide. Scrum should be a lightweight wrapper for eXtreme Programming, an agile approach to writing code, to develop more quality software with less “wasted” time. Some experts state agile is not the single best way for anyone. Some experts state SCRUM is flawed, to begin with. Others see it as lightweight and abstract. Experts from all over the world are trying to solve this knot in the software development community. Larger Companies are attracted to more cost-efficient ways to develop software but are struggling to change their hierarchy. Finding ways to close the gaps, such as like:

What are companies struggling with? How can you solve this? Why does SCRUM work at a small scale but is not easily scalable? What solutions are out there? Why is not everybody using them? Does agile even work at larger scales? What needs to be done to become more agile at a large scale?

Why do larger software companies struggle easier with scrum?

Scaling Scrum in a Large Globally Distributed Organization: A Case Study[1]

Scrum in Practice: an Overview of Scrum Adaptations[2]

Inter-team coordination in large-scale globally distributed scrum: do scrum-of-scrums really work?[3]

Distributed Agile Development: Using Scrum in a Large Project[4]

When agile meets the enterprise[5]

What does SCRUM look like in theory?

The Scrum Guide[6]

Introducing Scrum into Large Teams[7]

Succeeding with Agile: Software Development Using Scrum[8]

Back to Basics: The Role of Agile Principles in Success with a Distributed Scrum Team[9]

Agile software development methods: Review and analysis[10]

Agile at Scale[11]

Making sense of agile project management: balancing control and agility[12]

What does SCRUM look like in practice?

Using Scrum in Distributed Agile Development: A Multiple Case Study[13]

Agile project management with Scrum: A case study of a Brazilian pharmaceutical company IT project[14]

Derived Thesis

How can the practice-theory gap of SCRUM as an agile framework be closed for larger software companies?

Why do larger software companies struggle easier with scrum?

What are the differences between theory and practice?

Are there different ways SCRUM is used in practice?

Goals:

Resolve the question of why scrum should or should not be used at larger-scale companies.

Present solutions to common problems that agile-interested larger companies face.

Discuss the sensibility of agile in larger companies in the first place.

Add guidelines for larger companies on how to resolve conflicts and problems themselves to close the gap.

Procedure

Analyze the problems larger companies face and why smaller ones do not.

Analyze agile as a culture.

Analyze SCRUM as a framework.

Define requirements for agile and scrum.

Find solutions for larger companies by literature.

Let experts (developers, managers, consultants and coaches) rate the plausibility of these solutions.

Explain the results of the interviews and give guidelines.

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