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Degree Programme in Information Networks

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# **What exactly is the use of dailies:**

## **Evolution of practice and process in a software development team**

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# Chapter 1

## Introduction

### 1.1 Background and motivation

Agile software development practices have become mainstream (West et al., 2010). The Scrum methodology (Schwaber, 1995) belongs among the most popular (West et al., 2010), being heralded as virtually a de-facto industry standard (Marchenko and Abrahamsson, 2008).

Necessity of face-to-face interaction is emphasized in agile literature as critical for transfer of ideas and achieving innovative results. (Highsmith and Cockburn, 2002) In the agile manifesto, this was considered important enough for it to take first place on a list of agile values: “individuals and interactions over processes and tools”. (Beck et al., 2001)

The “daily scrum”, a meeting of developers deriving its name from the Scrum methodology, as the most prominent component of the leading individual methodology (West et al., 2010), can be claimed to have become a symbol of sorts for agility itself.

Agile process models have been further characterized with simplicity and ease of adaptation as key (Abrahamsson et al., 2002). For instance, time constraints of a daily may be relaxed or the general agenda modified if it is found that they do not aid in reaching desired goals (Marchenko and Abrahamsson, 2008). Agile is represented as the antithesis of dogma, being fit for critical inspection and malleable to use-case specific needs. Yet its

nature seems to have changed with introduction to the mainstream (West et al., 2010), with Marchenko and Abrahamsson (2008) citing problems like “too many meetings” and disciplined effort required to “keep it simple” as present challenges.

- Kanban endorses “starting where you are” and evolving your process from there
- “Evolution”: incremental improvement through an iterative process of “seeing what sticks”

## 1.2 Research problem

*How do dailies enable process evolution in a software development team?*

Agile processes and practitioners’ understanding thereof evolve with use. I am interested in discovering whether the “heart” of agile, namely the daily meetup, has a relation to enabling this evolution. Can the daily itself be seen as a tool for gaining knowledge not only on proceedings, but the processes and practices applied?

## 1.3 Timeline

**November 2015** Kickoff, research plan drafted, collection of empirical data started.

**December 2015** Empirical data collection complete. Beginning of empirical data analysis.

**January 2016:** Theoretical framework assembled.

**February 2016:** Empirical data analysis complete.

**March 2016:** Interpretation of empirical data through theory.

**April 2016:** Intensive writing period. Completion of theoretical synthesis.  
Empirical conclusions.

**May 2016:** Thesis completed.

## Chapter 2

# Theoretical framework

### 2.1 Theoretical approach

Depictions of agile process characteristics:

- (West et al., 2010)
- (Robinson et al., 2007)
- (Marchenko and Abrahamsson, 2008)

Characterization of scrum / kanban boards or virtual ones as epistemic objects:

- Visualizations as objects of continuously unfolding epistemology (Ewenstein and Whyte, 2009)
- Boundaries as enablers of and barriers to innovation (Carlile, 2002)

How might new information be created by manipulating aforementioned artefacts:

- New knowledge creation by intersubjectively accepted novel distinctions (Tsoukas, 2009)

## **2.2 Theoretical research questions**

- How does process evolution take place in knowledge work?
- What are the prerequisites for process evolution in knowledge work organizations?
- How can the practice of a daily support process evolution in a software development team?

## Chapter 3

# Empirical study

### 3.1 Empirical approach

- Ethnographically-inspired studies of agile practices have been undertaken before (Robinson et al., 2007; Marchenko and Abrahamsson, 2008) and similar approaches would seem valid in this context
- Microethnography (Streeck and Mehus, 2005) sounds like a suitable empirical lens considering that we are interested in seeing if and how speech and manipulation of cognitive artefacts might yield knowledge on the problem of processes and work organization

### 3.2 Empirical research questions

- How is the daily used as a practice for furthering goals by individual team members?
- How does manipulation of process artefacts within a daily affect practices outside it?
- How is knowledge created within the proceedings of a daily?



### 3.3 Research setting

- Helsinki-based software startup with a headcount of 20 people
- In focus is the software development team with 10 people
- The team’s daily meeting around a collection of virtual “kanban boards” can be taken as an opportunity to learn about how the boards are used and the consequences of their use

## Chapter 4

# Conclusions

### 4.1 Practical implications

- Dailies are a huge cost: they are synchronous and take up a significant slice of developers' time
- Because no tangible “work” gets done, the only justifiable use of dailies is the potential for knowledge transfer and creation
- Exposition on the mechanisms of knowledge creation within dailies will allow organizations to structure their use of the time taken for more of the intangible benefits desired

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