

A tough Nut to Crack – Implementing Agile Software Development Methods in Organizations with Strong Working Councils

Master Thesis

University of Cologne – Professorship for Integrated IS | viadee IT-Unternehmensberatung

Problem Statement

Although many organizations are willing to promote the implementation of agile methods for software development such as Scrum or Extreme Programming, current studies indicate challenges in implementing agile development methods in large scale organizations (VersionOne 2015). One of the key challenges when implementing agile development methods within larger organizations, specifically in Europe and Germany, is to overcome reservations of the working council. Agile methodologies generally rely on work transparency meaning that all relevant aspects of the development process need to be visible to all responsible for its outcome (Scrum-Guide2013). It is the basic prerequisite for self-organizing teams. Team members in agile environments exchange a lot of information regarding their individual work progress on a daily basis and use tools such as agile Boards to foster transparency. Communicating (and documenting) the work progress of employees is generally an aspect of Agile, which working councils feel uneasy about when being introduced to agile methodologies.

Goal of the Thesis

The goal of the thesis is threefold: Firstly, the master student should, based on a thorough literature review, identify challenges for implementing agile software development in general and concerns of the working council for implementing such methods in particular. Secondly, the student should empirically develop a framework with regard to how the working council's concerns could be overcome in practice, for example, by tailoring agile methodologies without losing means to provide process transparency. This conceptual framework should be based on qualitative or quantitative empirical fieldwork. Thirdly, the student should provide suitable future research directions based on the developed framework in step 2 of the master thesis.

Thesis Approach (high-level)

0. Definition of Final Problem Statement
1. Execution of a Structured Literature Review on
 - a. Challenges for implementing agile development methodologies in Germany
 - b. Concerns of German Working Councils with regard to Agile Development
2. Development of a tailored agile process focusing on the mitigation of the working council's concerns identified within step 2b, using qualitative or quantitative empirical research methods.
3. Identification of future research directions based on the developed framework and the overarching thesis results

Corresponding Theories / Theoretical Lenses (to be discussed)

- Institutional Theory / Institutional Logics Perspective
- Social Exchange Theory

In case of interest in this master thesis, please contact

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