

Examining Technical Debt Management in Austrian Software Companies

Start: Immediately (duration approx. 5-6 months)

Location: Flexible

Supervisor: Dipl.-Ing. Camilla Reis BSc

PROBLEM DEFINITION / GOAL:

Technical debt (TD) often results from strategic trade-offs made under time pressure and resource constraints. Managing TD is crucial for long-term software quality. While academic literature and empirical studies outline various classifications for managing TD, it remains unclear how well these are understood, communicated, and implemented in Austrian software development companies. Research in other geographical regions has been done to understand how TD is managed; however, cultural factors may influence the participants' experiences and perspectives on TD management. This thesis aims to explore how TD is perceived and managed in Austrian development teams compared to how it is described in literature. The aim is achieved by conducting a systematic literature review and collecting empirical data through qualitative methods. The outcome is expected to help bridge and improve communication between research and practice.

TASKS:

- Desk research to understand the theoretical foundations of TD and its management
- Conduct a systematic literature review to identify TD management practices and definitions
- Collect and analyze empirical data collected from Austrian software development companies with qualitative methods
- Analyze and compare results to identify similarities and differences in TD management approaches from literature and empirical data
- Synthesize results and discuss findings in a written master thesis

Requirements: Courses General Management and Organisation, Business Model Management, and Technology Management desired but not mandatory

Field of Study: preferably Software Engineering Management