# Abstract

This thesis is about *the codification of organisational knowledge in technical work domains*. The motivation for studying the particular role of codification is the dialectics between the everyday need for codified and IT-supported categories and the long term impossibility of "bracketing off" social activities into codified units. Generally, codification is the core principle of IT support. Different technologies, ranging from email, and ICQ to intranets and structured databases, all rely on sets of explicit categories and in some instances implement specific semantics characterising the relationships between categories.

I have conducted two case studies of knowledge codification in order to contribute to the research and practice within the knowledge management (KM) and computer supported cooperative work (CSCW) fields. These cases are derived from knowledge-intensive work settings in technical domains. The focus for the studies has been the complex relationship between people and technology when accomplishing problem solving and knowledge creation and sharing in daily work practice. IT is generally considered to support a variety of work aspects that need to be conceptualised and modelled in order to be designed in new IT support. For that, it is important to understand the underlying work practice. My ambition is to have a deep understanding of the different aspects that contribute to the core essence of computer supported knowledge codification.

This research contributes to the fields of KM and CSCW by offering detailed analyses and design implications of computer supported knowledge codification. The main findings are:

- The codification of knowledge requires *work efforts* with particular attention to the *social* activities: *collaboration, classification, negotiation*, and *reification*.
- The role of codification is explained with several varying purposes, such as *understanding, improving, mediating* and *facilitating* technical work practice. The studies suggest that the focus of the analysis should be *communities of practice*, in which the degree of social engagement is emphasised.
- The IT support should reflect the social activities of the knowledge codification work, which means to re-direct the narrow focus from *what* knowledge to codify, to also address *how* knowledge is codified, and *why*.