Abstract

The introduction of information technology (IT) to support business processes is often accompanied by reorganisation activities. Conducting these IT and reorganisation projects is a hard task especially for small and medium sized enterprises (SME). Lack of experience and know how in the field of IT-projects often leads to the wrong choice of approaches and to an inappropriate use of methods and tools.

Facing this problem within this thesis the author develops a methodology that enables project managers in SME in such situations to employ appropriate methods and tools in a goal-oriented manner. The high practical relevance of this issue is indicated by the rising importance of IT in SME on the one hand and the commercial relevance of SME in Germany and Europe on the other hand.

Due to the big heterogeneity among SME, it is not possible to establish one standardised modus operandi that fits all SME. Thus the methodology developed in this thesis is based on the specific situation of a special SME. Starting point of that methodology is to gather characteristics that specify the project related situation of a company. Based on the gathered information an appropriate project structure, the required project management activities and the appropriate methods and tools to support these management activities are derived. The deduction is done by a rule base based on predicate logic. Exemplary implementations demonstrate the full functionality of the developed methodology.

The practical application of the methodology is hardly possible without supporting information technology. Therefore the last chapter of this thesis presents the design and prototype implementation of a web based decision support system that represents the developed methodology.