

**Martin Cierjacks, *Task-modelling as a means to user-orientation in object-oriented software-engineering. Creating the “Instrument zur Vorgangs-Analyse (IVA)”*, Diss. Trier 2000**

The number of computer-supported jobs is constantly increasing. Now ISO 13407 requires an engineering process that focuses on the user's needs. In the last decades object-orientation became a common standard in software-engineering, which is characterised by an encapsulation from methods and data in objects and by an iterative process. This object-oriented engineering-process and the new ISO-norm are making user-perspective a special point of interest for software-engineers.

For taking user requirements into account, a tool is necessary, that describes the user's view on his task efficiently, completely and accurately. This thesis derives the requirements of the persons involved in the process of software-development from known theoretical concepts. The persons involved are the object-oriented software-engineers and the users as specialists for their tasks. The Instrument zur Vorgangsanalyse (IVA) is described and the construction of the instrument according to the needs of the persons involved will be explained. The instrument contains a combination from structured interview and a structure-laying-technique, which visualises the user's task and the surrounding work-flow by means of an easy-to-apply paper-pencil-method. Test criteria for qualitative instruments are derived for validation. Four different studies are described for testing the derived criteria. The results of this testing show, that the instrument can be used in the process of object-oriented software-engineering. It is fit to facilitate the cooperation between software-developer and user.