

Abstract of the dissertation

Evaluation of a User Centred Design Process Assessment – Empirical Analysis of Quality and Usability in a Real World Application

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The thesis deals with the evaluation of a user centred design process assessment, which is based on the ISO/PAS 18152 and ISO/IEC 15504 standards. The evaluation aims at determining the usability, validity, reliability and objectivity of the assessment. Therefore the assessment was conducted at Siemens Medical Solutions – Health Services (HS) Soarian Clinicals (SC), Malvern, USA.

The thesis provides an overview of different user centred design process models. The models are compared and a new generalized process model is generated. Furthermore, assessment approaches are introduced and discussed. Out of these models and approaches, the models described in ISO/PAS 18152 and ISO/IEC 15504 were chosen as reference model and assessment framework for the process assessment, which was conducted and evaluated.

The author describes the procedure of the assessment as well as the assessed user centred design process and the outcome of the assessment – the process capability. Furthermore, the evaluation of the process assessment and its results are described. Based on these findings, measures for improvement are derived, which can be used for further assessment development, as well as hints and recommendations for practitioners, e.g. assessors or process managers. The dissertation concludes with an outlook on possible future research topics and on further development of process assessments.