

Adoption of Requirements Engineering: Conditions for Success

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Abstract

This talk will be about technology transfer from Requirements Engineering (RE) research results into mainstream RE practice. Panels at CAiSE'00 and ICRE'00 organized by us about this topic identified several obstacles as well as incentives that seem to apply world-wide. Here, we will focus on our own experience. What are the conditions for successfully adopting RE in practice?

Whenever the customer does not impose a method to be used, we develop software using our own methodology SEM, e.g., stdSEM[®] for “standard” projects or ooSEM[®] for object-oriented development. For systematically acquiring and representing requirements, we developed additional support through a more specific method and a supporting tool called RETH (Requirements Engineering Through Hypertext). Although we think that not all our findings are specific to those methods, we will sketch them in order to clarify the background.

We found many challenges faced by requirements practitioners and developed practical solutions and techniques. In a nutshell, success is not for granted. We observed that it depends on certain conditions. So, successful adoption of requirements engineering in practice is possible, but it is not easy!

About the Speaker

Dr. Hermann Kaindl is a senior consultant with the division of program and systems engineering at Siemens AG Österreich for requirements engineering. At Siemens he has gained more than twenty years of experience in software development. He contributes to the application of relevant theories of requirements engineering that underpin industrial projects. He is also an adjunct professor at the Technical University of Vienna.

Dr. Kaindl has published three books (such as “Methodik der Softwareentwicklung: Vorgehensmodell und State-of-the-Art der professionellen Praxis”, Braunschweig / Wiesbaden: Vieweg, 1998, with B. Lutz and P. Timpold) and more than sixty papers in refereed journals, books and conference proceedings. He has given tutorials at international conferences on requirements reuse (with M. Mannion), and in-house courses about object-oriented modeling as it relates to requirements, domain models and their transition to design models.

Dr. Kaindl is a senior member of the IEEE, a member of AAAI, and the ACM, and is on the executive board of the Austrian Society for Artificial Intelligence.