

Project Note

Lightweight RUP Adaptation in Requirements Management

For years the telecommunications industry has changed from hardware to more flexible software solutions. Efficiency in requirements management is increased through modern procedures to improve the efficiency.

Task

For years the telecommunications industry has been in a state of flux going from services and systems, predominantly implemented through hardware, to programmable and thus more flexible software solutions. This brought along the necessity to record and manage requirements by methods suitable for software projects. Challenges in this domain are, for example, the presentation of the requirements in a comprehensible form for programmers (who may be unfamiliar with the subject) and consideration of requirement modifications in the development process as well as release-oriented management.

Implementation

At first, the customer identified a pilot project. On the basis of this project, the particular conditions of the sector in general, as well as those of the company, were analysed. The knowledge gained from this analysis was used to adapt activities and artefacts from the Requirements Discipline of the Rational Unified Process to the special needs of the customer. Particular attention was paid to keep the process light and to incorporate it into activities of the existing action model. Furthermore, the employees were familiarised with the modified form of requirements management during training sessions of several days as well as through individual coaching during the project. As a result of the positive experience with the new processes and the resulting findings within the scope of the pilot project, it was decided that requirements management was to be professionalised in the entire technology sector. At the same time, particular importance was attributed to coordination among various company segments (global/local).



Customer benefits

- **Communication and documentation:** The uniform documentation of requirements, based on "best practices", e.g. use cases, significantly facilitated and optimised communication within the project as well as with outside contractors.
- **Tracking:** The tool-supported implemented traceability, i.e. tracking of requirements starting from the customer to the point of the finished software. It also made complete and consistent specifications possible and, in addition aided in the verification of (partial) systems delivered.
- **Best practices:** Used an external consultancy experienced in software engineering disciplines for the targeted selection of methods and artefacts most suitable for the company.

Zühlke Engineering AG
Wiesenstrasse 10a
8952 Schlieren (Zurich)
Switzerland
Phone +41 44 733 6611
Fax +41 44 733 6612
info@zuehlke.com
www.zuehlke.com