Keynote Talk
Piecing Together the Requirements Jigsaw-Puzzle

Ian Alexander

Scenarioplus Ltd., UK
iany@scenarioplus.org.uk

Software developers have been made to write requirements for their projects since the 1960s. Researchers have investigated every imaginable technique. But requirements are still not being put together well. Something is going wrong.

One reason is that while different schools of research advocate powerful methods – goal modeling, scenario analysis, rationale modeling and more – industry still believes that requirements are stand-alone imperative statements. The mismatch between the wealth of techniques known to researchers and the impoverished lists of shall-statements used in industry is striking.

The solution cannot be found by devising yet more elaborate techniques, yet more complex puzzle-pieces. Even the existing ones are scarcely used in industry. Instead, we need to work out how to assemble the set of available "puzzle-pieces" – existing ways of discovering and documenting requirements – into simple, practical industrial methods.

Another reason is that existing textbooks, and perhaps requirements education and training too, largely assume that projects are all alike, developing stand-alone software from scratch. But projects are constrained by contracts, fashion, standards and not least by existing systems. The problems they must solve, and the techniques they need to use, vary enormously. Pure and simple "green-field" development is the exception.

This talk suggests:

- what the pieces of the requirements jigsaw-puzzle are – for example, scenario analysis and goal modelling;
- how, in general, they can be fitted together – for example, as sequences of activities and by traceability;
- how, more specifically, projects of different types can re-assemble the pieces to solve their own puzzles – for example, by tailoring imposed templates, or developing processes appropriate to their domain and situation.

There are numerous answers to each of these questions. Perhaps the real message is that there is not one requirements engineering, but many.

R. Wieringa and A. Persson (Eds.): REFSQ 2010, LNCS 6182, p. 1, 2010.