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# Product-Focused Software Process Improvement

8th International Conference, PROFES 2007  
Riga, Latvia, July 2-4, 2007  
Proceedings

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# Preface

The Eight International Conference on Product-Focused Software Process Improvement (PROFES 2007) brought together researchers and industrial practitioners to report new research results and exchange experiences and findings in the area of process and product improvement. The focus of the conference is on understanding, learning, evaluating, and improving the relationships between process improvement activities (such as the deployment of innovative defect detection processes) and their effects in products (such as improved product reliability and safety). Consequently, major topics of the conference include the evaluation of existing software process improvement (SPI) approaches in different contexts, the presentation of new or modified SPI approaches, and the relation between SPI and new development techniques or emerging application domains.

This year's conference theme focused on global software development. More and more products are being developed in distributed, global development environments with many customer-supplier relations in the value chain. Outsourcing, off-shoring, near-shoring, and even in-sourcing aggravate this trend further. Supporting such distributed development requires well-understood and accurately implemented development process interfaces, process synchronization, and an efficient process evolution mechanisms. Overcoming cultural barriers and implementing efficient communication channels are some of the key challenges. It is clear that process improvement approaches also need to consider these new development contexts.

A second key focus of PROFES 2007 was on agile software development. Market dynamics require organizations to adapt to changes of the development environment and to enforce innovations better and faster. This often results in process changes that impose risk challenges for SPI approaches. Advanced SPI is required to support the assessment of the impact of process changes such as the introduction of agile methods. Due to the fact that software development processes are human-based and depend heavily on the development context, process changes and their resulting effects should be considered carefully. We consider the development context to include at least the domain-specific characteristics, the workforce capabilities, and the level of work distribution.

The technical program was selected by a committee of leading experts in software process modeling and SPI research. This year, 56 papers from 21 nations were submitted, with each paper receiving at least three reviews. The Program Committee met in Riga for one full day in February 2007. The Program Committee finally selected 30 technical full papers. The topics indicate that SPI remains a vibrant research discipline of high interest for industry. Emerging technologies and application domains, a paradigm shift to global software and system engineering in many domains, and the need for better decision support for SPI are reflected in these papers. The technical program consisted of the tracks global software development, software process improvement, software process modeling and evolution, industrial experiences, agile software development, software measurement, simulation and decision support, and processes and methods. We were proud to have four distinguished keynote speakers,

Carol Dekkers, Dieter Rombach, Jari Still, Guntis Urtāns, as well as interesting tutorials and a collocated workshop.

We are thankful for the opportunity to serve as Program Co-chairs for this conference. The Program Committee members and reviewers provided excellent support in reviewing the papers. We are also grateful to the authors, presenters, and session chairs for their time and effort that made PROFES 2007 a success. The General Chair, Pasi Kuvaja, and the Steering Committee provided excellent guidance. We wish to thank the University of Latvia, the Fraunhofer Institute for Experimental Software Engineering (IESE), VTT, the University of Oulu and all the other sponsors and supporters for their contributions and making the event possible. We would especially like to thank the Organizing Chairs Darja Šmite and Juris Borzovs and the Local Organizing Committee for their highly engaged organization of the conference in Riga. Last but not least, many thanks to Timo Klein at Fraunhofer IESE for copyediting this volume.

April 2007

Jürgen Münch  
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