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Agile Processes in Software Engineering and Extreme Programming

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Proceedings

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Preface

"The Program Commitee of XP 2000 invites you to participate in this meeting of software development researchers, professionals, educators, managers, and students. The conference brings together people from industry and academia to share experiences and ideas and to provide an archival source for important papers on flexible process-related topics. The conference is also meant to provide information and education to practitioners, to identify directions for further research, and to be an ongoing platform for technology transfer."

This was the goal of the 1st XP 2000 Conference. The Organizing Committee expected around 60 people to attend, and they got 160. The subsequent conferences were held again in Sardinia and then all over Europe, maintaining the position of a leading world event on the topics of agility in software and system development. Now the International Conference on Agile Processes in Software Engineering and eXtreme Programming, XP 2007, is in its eighth edition.

During these years, the agile approach has become mainstream in the software industry. It is able to produce business value early in the project lifetime and to successfully deal with changing requirements. It focuses on the delivery of running, tested versions of the system at a constant pace, featuring a continuous interaction with customers, and paying extreme attention to the human component of software development. The rapidly growing scientific and practical evidence shows many quality gains, including increased productivity, fewer defects, and increased customer satisfaction.

The conference brings together both industrial practitioners and researchers. It is based not only on paper presentation, but also on workshops, tutorials, satellite symposia, such as the PhD Symposium, and activity sessions. These dynamic and interactive activities are the peculiarity of the Conferences on Agile Processes in Software Engineering and eXtreme Programming.

The topics of interest in the conference stress practical applications and implications of agile methodologies, with a particular focus on new openings, domains, and insights. They include theoretical, organizational, and practical aspects. Among the first, we may quote:

- Foundations and rationale for agile methods
- Digital ecosystems and agility
- Tailoring and building of agile processes
- Metrics, automated metrics, and analysis

Among the organizational aspects, both firm organization and team organization are covered. The former aspects include:

- Organizational change, management, and organizational issues
- Combining or streamlining the business processes and agile SW development
- Business agility

- Commitment, motivation, and culture in an agile SW development organization
- Contracting processes and issues, including subcontracting

Team organizational aspects include:

- Case studies, empirical experiments, and practitioners' experience reports
- Education and training
- Agile development on a large scale including scalability issues

Practical aspects covered by the conference are:

- Combining industry quality standards (e.g., CMMI) and agile approaches
- Experimenting with agile practices: pair programming, test-first design, continuous integration, refactoring, etc.
- Agile software development tools and environments
- Agile development of open source software
- Agile offshore and distributed development
- Embedded software (e.g., SW/HW co-design) and agile SW development

Forty-five papers were submitted to this year's conference. These papers went through a rigorous reviewing process, and only ten were accepted as full papers. We received 35 experience reports and research ideas, among which 20 were accepted for inclusion in this book as short reports. Many proposals were also submitted: 34 workshops, 35 tutorials, and 5 panels.

Overall, we believe that this book includes many rigorous, detailed and sound papers, able to give insights into the current state of the art of agile methodologies, and into its forecasted developments in the near future. Finally, on behalf of all members of the Organizing Committee, we would like to thank all authors of submitted papers, experience reports, research ideas, tutorials, workshops, panels, activities, papers to the PhD Symposium and all invited speakers for their contributions, our sponsors, all members of the Program Committee as well as other reviewers for their careful, critical, and thoughtful reviews, and all others involved in helping to make XP 2007 a success.

April 2007

Giulio Concas
Ernesto Damiani
Marco Scotto
Giancarlo Succi

Organization

XP 2007 was organized by research units of the MAPS (Agile Methodologies for Software Production) project: the Free University of Bolzano-Bozen, the University of Cagliari, CRS4 (Center for Advanced Studies, Research and Development in Sardinia), and the University of Milan.

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Table of Contents

Managing Agile Processes

Comparing Decision Making in Agile and Non-agile Software Organizations 1
Carmen Zannier and Frank Maurer

Up-Front Interaction Design in Agile Development 9
Jennifer Ferreira, James Noble, and Robert Biddle

British Telecom Experience Report: Agile Intervention – BT's Joining the Dots Events for Organizational Change 17
Sandra McDowell and Nicola Dourambeis

Agile Software Development Meets Corporate Deployment Procedures: Stretching the Agile Envelope 24
Olly Gotel and David Leip

Extending Agile Methodologies

Supporting Agile Reuse Through Extreme Harvesting 28
Oliver Hummel and Colin Atkinson

Using Horizontal Displays for Distributed and Collocated Agile Planning 38
Robert Morgan, Jagoda Walny, Henning Kolenda, Estaban Ginez, and Frank Maurer

Applying Agile to Large Projects: New Agile Software Development Practices for Large Projects 46
Ahmed Elshamy and Amr Elssamadisy

Teaching and Introducing Agile Methodologies

Job Satisfaction and Motivation in a Large Agile Team 54
Bjørnar Tessem and Frank Maurer

Motivation and Cohesion in Agile Teams 62
Elizabeth Whitworth and Robert Biddle

How to Build Support for Distributed Pair Programming 70
Jacek Dajda and Grzegorz Dobrowolski

Methods and Tools

A Metamodel for Modeling and Measuring Scrum Development Process 74
Ernesto Damiani, Alberto Colombo, Fulvio Frati, and Carlo Bellettini

Tracking the Evolution of Object-Oriented Quality Metrics on Agile Projects 84
Danilo Sato, Alfredo Goldman, and Fabio Kon

FitClipse: A Fit-Based Eclipse Plug-In for Executable Acceptance Test Driven Development 93
Chengyao Deng, Patrick Wilson, and Frank Maurer

EzUnit: A Framework for Associating Failed Unit Tests with Potential Programming Errors 101
Philipp Bouillon, Jens Krinke, Nils Meyer, and Friedrich Steimann

Empirical Studies

Does XP Deliver Quality and Maintainable Code? 105
Raimund Moser, Marco Scotto, Alberto Sillitti, and Giancarlo Succi

Inspecting Automated Test Code: A Preliminary Study 115
Filippo Lanubile and Teresa Mallardo

A Non-invasive Method for the Conformance Assessment of Pair Programming Practices Based on Hierarchical Hidden Markov Models 123
Ernesto Damiani and Gabriele Gianini

Predicting Software Defect Density: A Case Study on Automated Static Code Analysis 137
Artem Marchenko and Pekka Abrahamsson

Empirical Evidence Principle and Joint Engagement Practice to Introduce XP 141
Lech Madeyski and Wojciech Biela

Methodology Issue

Power of Recognition: A Conceptual Framework for Agile Capstone Project in Academic Environment 145
Ville Isomöttönen, Vesa Korhonen, and Tommi Kärkkäinen

Agile Commitments: Enhancing Business Risk Management in Agile Development Projects 149
Mauricio Concha, Marcello Visconti, and Hernán Astudillo

Usability in Agile Software Development: Extending the Interaction Design Process with Personas Approach 153
Jukka Haikara

Defining an Integrated Agile Governance for Large Agile Software Development Environments 157
Asif Qumer

Ph.D. Symposium

Enhancing Creativity in Agile Software Teams 161
Broderick Crawford and Claudio León de la Barra

Investigating Adoption of Agile Software Development Methodologies in Organisations 163
Antony Grinyer

Agile Software Assurance 165
Noura Abbas, Andrew M. Gravell, and Gary B. Wills

Posters

User Stories and Acceptance Tests as Negotiation Tools in Offshore Software Development 167
Ivan Chubov and Dmitri Droujkov

A Case Study of the Implementation of Agile Methods in a Bioinformatics Project 169
Xueling Shu, Andrei Turinsky, Christoph Sensen, and Frank Maurer

Adapting Test-Driven Development for Innovative Software Development Project 171
Deepti Mishra and Alok Mishra

Learning Agile Methods in Practice: Advanced Educational Aspects of the Varese XP-UG Experience 173
Federico Gobbo, Piero Bozzolo, Jacopo Girardi, and Massimiliano Pepe

Experience Reports

Overcoming Brooks' Law 175
Kealy Opelt

Project Bid on Iteration Basis 179
Juanjuan Zang

Making the Whole Product Agile – A Product Owners Perspective 184
Dharmesh Raithatha

Financial Organization Transformation Strategy 188
Juanjuan Zang

An Agile Approach to Requirement Specification 193
Tom J. Bang

The Application of User Stories for Strategic Planning 198
Lawrence Ludlow

Introducing Agile Methods into a Project Organisation 203
Tom J. Bang

Agile Development Meets Strategic Design in the Enterprise 208
Eric Wilcox, Stefan Nusser, Jerald Schoudt, Julian Cerruti, and Hernan Badenes

An Agile Approach for Integration of an Open Source Health Information System 213
Guido Porruvecchio, Giulio Concas, Daniele Palmas, and Roberta Quaresima

Agile Practices in a Large Organization: The Experience of Poste Italiane 219
Mauro Sulfaro, Michele Marchesi, and Sandro Pinna

Multi-tasking Agile Projects: The Focal Point 222
Ruud Wijnands and Ingmar van Dijk

Extreme Programming Security Practices 226
Xiaocheng Ge, Richard F. Paige, Fiona Polack, and Phil Brooke

Multi-tasking Agile Projects: The Pressure Tank 231
Ruud Wijnands and Ingmar van Dijk

The Creation of a Distributed Agile Team 235
Paul Karsten and Fabrizio Cannizzo

Distributed Scrum in Research Project Management 240
Michele Marchesi, Katiuscia Mannaro, Selene Uras, and Mario Locci

Multiple Perspectives on Executable Acceptance Test-Driven Development 245
Grigori Melnik and Frank Maurer

Test Driving the Wrong Car 250
Ingmar van Dijk and Ruud Wijnands

Epistemological Justification of Test Driven Development in Agile Processes 253
Francesco Gagliardi

Research Ideas

How Does Readiness for Agile Development Relate to Team Climate and Individual Personality Attributes? 257
Tali Seger, Orit Hazzan, and Ronen Bar-Nahor

Communication Flow in Open Source Projects: An Analysis of Developers' Mailing Lists 261
Selene Uras, Giulio Concas, Manuela Lisci, Michele Marchesi, and Sandro Pinna

Panels

Community Reflections 266
David Hussman

To Certify or Not to Certify 268
Angela Martin, Rachel Davies, David Hussman, and Michael Feathers

Learning More About "Software Best Practices" 271
Steven Fraser, Scott Ambler, Gilad Bornstein, Yael Dubinsky, and Giancarlo Succi

Author Index 275