

Table of Contents

Keynote Address: The Cascading Benefits of Software Process Improvement	1
<i>Presenter: Bill Curtis</i>	
Keynote Address: Capitalizing on Experience	2
<i>Presenter: Dieter Rombach</i>	
Keynote Address: Software Development Challenges for the 2000's	3
<i>Presenter: Roger G. Fordham</i>	
Panel Session Corporate Software Engineering Knowledge Networks: How Can They Improve Training of the Workforce in Software Organisations?	4
<i>Dietmar Pfahl (Panel Chair), Reidar Conradi, Michael Haug, Harri Reiman and Kurt Schneider</i>	

Process Improvement

Active Probes Synergy in Experience-Based Process Improvement	6
<i>Kurt Schneider</i>	
A Framework for the Continuous Monitoring and Evaluation of Improvement Programmes	20
<i>Andreas Birk, Dirk Hamann and Susanne Hartkopf</i>	
No Improvement without Learning: Prerequisites for Learning the Relations between Process and Product Quality in Practice	36
<i>Rini van Solingen, Egon Berghout, Rob Kusters and Jos Trienekens</i>	
Introducing the Data Role in Models for Database Assessment	48
<i>Juan Garbajosa, Pedro P. Alarcon, Hector Garcia, Maria Alandes and Mario Piattini</i>	
Applying Benchmarking to Learn from Best Practices	59
<i>Andrew Beitz and Isabella Wieczorek</i>	
Modelling Usability Capability – Introducing the Dimensions	73
<i>Timo Jokela and Pekka Abrahamsson</i>	
Using Simulation to Visualise and Analyse Product-Process Dependencies in Software Development Projects	88
<i>Dietmar Pfahl and Andreas Birk</i>	
Transforming Software Organizations with the Capability Maturity Model	103
<i>Jesper Arent</i>	

Empirical Software Engineering

The Effect of Constraint Notification within a Case Tool Environment
on Design Productivity and Quality 115
Ross Jeffery, Fredrik Utbult, Kevin Chung and Sabine Bruyninx

Is a Design Rationale Vital when Predicting Change Impact?
A Controlled Experiment on Software Architecture Evolution 126
Lars Bratthall, Enrico Johansson and Björn Regnell

Modeling and Analysis of Software Aging Process 140
Akito Monden, Shin-ichi Sato, Ken-ichi Matsumoto and Katsuro Inoue

Industrial Experiences

Usability Engineering in Concurrent Product Development 154
Pekka Ketola

An Industrial Experience in Using Problem Resolution Process
for Software Porting 168
Janis Plume and Juris Strods

Managing Engineering and Product Technology:
A Method for Technology Assessment 180
Mohsen Rezagholi and Michael Frey

The Benefits of Networking 193
*Jørgen Bøegh, Mads Christiansen, Ebba Póra Hvannberg
and Tor Stalhane*

Project Experience Database:
A Report Based on First Practical Experience 204
Stefan Engelkamp, Susanne Hartkopf and Peter Brössler

SPI - A Guarantee for Success? – A Reality Story from Industry 216
Erik Rodenbach, Frank van Latum and Rini van Solingen

Product Driven Process Improvement PROFES Experiences at Dräger 232
F. van Latum and A. van Uijtregt

Experiences on Lean Techniques to Manage Software Suppliers 244
Ton Vullingsh, Thomas Gantner, Stephan Steinhauer and Thomas Weber

The PROFES Improvement Methodology - Enabling Technologies
and Methodology Design 257
Janne Järvinen, Seija Komi-Sirviö and Guenther Ruhe

Methods and Tools

Object-Oriented Design in Real-Time Embedded Robot Control Software . 271
Manfred Dresselhaus and Jörg Kirchhof

Managing Distributed Software Development - A Portfolio Based Methodology	282
<i>Nicholas Hawlitzky, Alexander Münnich, Beate Nothhelfer-Kolb and Martin Rappl</i>	

Software and Process Modelling

Formalizing SCM Use Cases within the Virtual Software Corporation	296
<i>Tuomas Ihme and Tua Rahikkala</i>	
The FEAST Approach to Quantitative Process Modelling of Software Evolution Processes	311
<i>Juan F. Ramil, Meir M. Lehman and Goel Kahen</i>	
A Description of a 'Framework Approach' to Evolutionary Systems Development	326
<i>Mark R. Whittington and Mike Shackleton</i>	

Software and Process Measurement

An Evaluation of Functional Size Methods and a Bespoke Estimation Method for Real-Time Systems	339
<i>Per Runeson, Niklas Borgquist, Markus Landin and Wladyslaw Bolanowski</i>	
Instrumenting Measurement Programs with Tools	353
<i>Ralf Kempkens, Peter Rösch, Louise Scott and Jörg Zettel</i>	

Organizational Learning and Experience Factory

A Relationship-Based View to Software Engineering Competence	376
<i>Veikko Seppänen</i>	
Software Experience Bases: A Consolidated Evaluation and Status Report	391
<i>Reidar Conradi and Torgeir Dingsøy</i>	
LIDs: A Light-Weight Approach to Experience Elicitation and Reuse	407
<i>Kurt Schneider</i>	

Author Index	425
---------------------------	-----

Product Focused Software Process Improvement
Second International Conference, PROFES 2000, Oulu,
Finland, June 20-22, 2000 Proceedings
Bomarius, F.; Oivo, M. (Eds.)
2000, XI, 426 p., Softcover
ISBN: 978-3-540-67688-1