Proceedings

The papers in this book comprise the industrial proceedings of the EuroSPI 2007 conference. They reflect the authors' opinions and, in the interests of timely dissemination, are published as presented and without change.

Their inclusion in this publication does not necessarily constitute endorsement by EuroSPI and the publisher.


EuroSPI

EuroSPI is a partnership of large Scandinavian research companies and experience networks (SINTEF, DELTA, STTF), the ASQF as a large German quality association, the American Society for Quality, and ISCN as the co-ordinating partner.

EuroSPI conferences present and discuss practical results from improvement projects in industry, focussing on the benefits gained and the criteria for success. Leading European industry are contributing to and participating in this event. This year’s event is the 14th of a series of conferences to which countries across Europe and from the rest of the world contributed their lessons learned and shared their knowledge to reach the next higher level of software management professionalism.

EuroSPI Chairs

General Chair Dr Richard Messnarz, ISCN

EuroSPI Marketing Chair Stephan Goericke, ISQI

Scientific Programme Committee Chairs: Prof. Tiziana Margaria University of Potsdam, Germany, Prof. Pekka Abrahamsson VTT and University of Oulu, Finland, Dr Nathan Baddoo School of Computer Science at the University of Hertfordshire, UK

Industrial Programme Committee Chairs: Risto Nevalainen FiSMA and STTF, Jorn Johansen, DELTA, Mads Christansen, DELTA, Nils Brede Moe, SINTEF

Tutorial Chair Dr Richard Messnarz, ISCN

Organising Chair Adrienne Clarke BA, ISCN

Industrial Programme Committee

Andreas Birk, SD&M AG, Germany
Contents

Experience Session I: SPI and Processes

ImprovAbility™ guidelines for low maturity organisations 1.1
Mads Christiansen and Jørn Johansen

Maintaining a Large Process Model Aligned with a Process Standard: an Industrial Example 1.11
Martin Solo, Jürgen Münch

Analysis of Most Common Process Modelling Mistakes in BPMN Process Models 1.21
Tomislav Rozman, Gregor Polančič, Romana Vajda Horvat

Experience Session 2: SPI Implementation

Establishment of a Performance Driven Improvement Program 2.1
Gunther Spork, Uwe Pichler

Experiences and Results from Tailoring and Deploying a Large Process Standard in a Company 2.15
Ove Armbrust, Jan Ebell, Ulrike Hammerschall, Jürgen Münch, Daniela Thoma

Practical Experiences on Using SPICE for SPI in an insurance Company 2.27
Heidi Wegelius, Mika Johansson

Experience Session 3: SPI and Knowledge Transfer

Multiplying Knowledge in ISO/IEC 15504 Based Improvements 3.1
Richard Messnarz, Christos Athanasiadis, Kerstin V. Siakas

Human Resources Based Improvement Strategies – the Learning Factor 3.13
Richard Messnarz, Michael Reiner, Gearoid O’Suillileabhain

Reusable Project Patterns to enhance Software Process Improvement 3.25
Diego Martín, Javier Garcia, Antonio Amezcua, Juan Llorens

Experience Session 4: SPI and Assessments

Integrated Process Improvement 4.1
Dr.-Ing. Dietmar Winner, Anne Kramer, Norbert Kastner

Achieving system quality in software intensive maritime systems 4.7
Asgeir Torstensen, Lars Bratthall, Torbjørn Skramstad, Egil O. Johansen

Software process improvement for the product lifecycle 4.15
Dipl.-Math. Dirk Malzahn
Experience Session 5: SPI and Assessments
Automotive-Adept: A lightweight assessment method for the Automotive Irish software industry
Fergal McCaffrey, Ita Richardson, Peter Möller

Assessing IT Service Management Processes with AIDA® – Experience Feedback
Ruddy Hilbert and Alain Renault

Experience Session 6: SPI and Measurement
Supporting Software Process Improvement Planning by Quantitative Process Models
Harald Klein, Thomas Birkhölzer, Christoph Dickmann, Sebastian Otte, Jürgen Vaupel, Ludger Meyer

An empirical study of introducing the Failure Mode and Effect Analysis technique
Torgrim Laursen and Tor Stålhane

Experience Session 7: SPI and Organisational Factors
Changing Altitudes – Improving performance
Tim Davis and Jill Pritchet

Outsource the Software Process Improvement consulting service: an alternative solution for Small-Settings
Jose A. Calvo-Manzano, Gonzalo Cuevas, Tomas San Feliu, Ariel E. Serrano

Experience Session 8: SPI and Organisational Factors
Focused Competence Planning for Large Scale Software Development
Tihana Galinac

Successful Six-Sigma Improvements in - Agile Methodology of Software Release Management
P Radhika Ravi

Experience Session 9: SPI and Assessments
Implementing a Value Assessment for Products: A Case Study
Pasi Ojala

Using ISO 15504 Process Assessment for Internal Financial Controls
János Ivanyos and Richard Messnarz

Experience Session 10: SPI and IT Management
Improving SME trust into IT consultancy: a network of certified consultants case study
Samuel Renault, Eric Dubois, Beatrice Barafort, Marc Krystkowiak

IT Security – A skills based elaboration of the IT Security Standards
Eva Feuer, Richard Messnarz and Damjan Eckert
Experience Session 11: SPI and Engineering Processes

Ten factors that impede improvement of verification and validation processes in software intensive organizations

Javier Garcia, Antonio de Amescua, Manuel Velasco, Ana Sanz

Software Process Improvement in Small Companies: An Experience

Esperança Amengual and Antônia Mas

Experience Session 12: SPI and Business Objectives

SPI from the Customers View - Experiences from an EUR 6 Mio Tender

Tomas Schweigert

QFD4SPI: A Technique to Monitor and Control Software Process Improvement Programs

José Francisco Landaeta, Javier Garcia Guzmán, Antonio Amescua Soco

ROI of Software Process Improvement at BL Informática - SPI is Really Worth

Analia Irigoyen Ferreira, Gleison Santos, Roberta Carqueira, Mariano Montoni, Ahilton Barreto, Ana Regina Rocha, Andrea O.S. Barreto, Reinaldo C. Silva Filho