7th International SPICE Conference 2007

Seoul, Korea
9 – 11 May 2007

ISBN: 978-1-5108-0241-4

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2007) by SPICE User Group
All rights reserved.

Printed by Curran Associates, Inc. (2015)

For permission requests, please contact SPICE User Group
at the address below.

SPICE User Group
c/o Dr. Rory O'Connor
School of Computing
Dublin City University
Glasnevin, Dublin 9
Ireland

Phone: +353 1 700 5643
Fax: +353 1 700 5442

roconnor@computing.dcu.ie

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

The 7th International SPICE Conference

on Process Assessment and Improvement

(SPICE 2007)

PREFACE ---------- N/A

Keynote I (abstract) ---------- N/A

SPICE in Retrospect: Developing a Standard for Process Assessment

Terry Rout (SQI, Griffith University, Australia)

Keynote II (abstract)

SPI Activities in Taiwan

Tzu-Lung Chang(Director, Organization Information Engineering Institute, Institute for Information Industry, Taiwan) and Shyh-Wen Ou

Status Report (abstract) ---------- N/A

Development of the International Standard

Alec Dorling and Terry Rout

Special Workshop (abstract) ---------- N/A

Assessing Organizational Maturity

Terry Rout and Alec Dorling

Technical Papers by Sessions

Technical Session I

Process Improvement for Web Information Systems Engineering ---------- 1

Gunar Fiedler, Bernhard Thalheim, Hannu Jaakkola, Timo Makinen, Timo Varkoi

A Model Process towards Modeling Guidelines to Build Certifiable UML Models in the Railway Sector ---------- 8

D. Okalas Ossami, J.M. Mota and J.L. Boulanger

Towards an ISO/IEC 15504-based Process Capability Model for Public University's Research Laboratory ---------- 12
Jorge Lopes da Silva, Olga Nabuco, Clenio Salviano, Marcelo Reis, Rubens Filho

Technical Session II

Empirical Case Study of Software Metrics using the SPICE Framework ---------- 22
Jari Soini, Timo Varkoi, Vesa Tenhunen, Markku Tukiainen

An Assessment and Analysis Tool for Statistical Process Control of Software Processes ---------- 29
Serkan Kırbaş, Dr. Ayça Tarhan, Onur Demirörs

A Service Extension for SPICE? ---------- 39
Dirk Malzahn

Technical Session III

Assessment and Improvement of Firm's Knowledge Management Capabilities by using a KM Process Assessment compliant to ISO/IEC 15504 ---------- 45
Bernard Di Renzo, Philippe Valoggia

Assessing the Feasibility of Implementing CMMI as a Software Process Improvement Initiative in a Research Based Software Organization ---------- 51
Manzil-e-Maqsood, Saira Anwar, Saqib Rehan, Rafia Bokhari, Shehar Bano

Industry Presentations by Sessions (abstract and ppt presentation)

Industry Presentation I

Process Integration in Organization: Lessons Learned ---------- N/A
JiSeong Song, Soo Kyoung Lim (Invited Presentation, LG CNS, Korea)

Process of Management of Order of Alteration Story of Experience - Ilog Technology ---------- N/A
Gisele Trentin da Silva, Demetrius Ribeiro Lima

Developing a PRM and PAM for an IT R&D Organization ---------- N/A
Young Ha Hwang, Sang Hyun Kim, Gil Jo Kim

A Case study on Software Process Improvement ---------- N/A
Kijun Park, Do Yeong Kim, Byeungpil Park, Hong Kyoon Ahn

Industry Presentation II

A New Software Process Evaluation Model for SME's in Korea ---------- N/A
ByungSun Ko, JaeSik Min, SangEun Lee (Invited Presentation, KIPA, Korea)

Information Systems Audit for Korean Government ---------- N/A
HyunMok Oh, JaeGyu Rim, Daul Shin, SoJung Kim

A Tale of Process and Quality Innovation in LG CNS Development Center China -- N/A
SeungWook Bang

Banking SPICE initiative N/A
Don Martin

Design and Development of integrated Software Process Improvement (SPI) knowledge base and methodology N/A
Raja Zurina and Raja Mohamed Ali