

Table of Contents

Chapter 1: Overview

Introduction and Motivation	3
Learning Organizations in the Software Engineering Domain	4
Knowledge Management Terminology	4
The Quality Improvement Paradigm	6
The Experience Factory Organization	8
Organizational Knowledge Creation	10
Enabling Techniques for Learning Organizations	11
Experimentation	12
Measurement	12
Modeling	13
Reuse	15
Computer Supported Collaborative Learning (CSCL)	15
Outlook	17
The Contributions from SEKE'99 and LSO'99 to this Book	18
Methodology	18
Applications	19
References	20

Chapter 2: Methodology

Systematic Population, Utilization, and Maintenance of a Repository for Comprehensive Reuse	25
<i>Klaus-Dieter Alihoff, Andreas Birk, Susanne Hartkopf, Wolfgang Müller, Markus Nick, Dagmar Surmann, Carsten Tautz</i>	
On Developing a Repository Structure Tailored for Reuse with Improvement	51
<i>Raimund L. Feldmann</i>	

Systematically Diagnosing and Improving the Perceived Usefulness of Organizational Memories	72
<i>Klaus-Dieter Althoff, Markus Nick, Carsten Tautz</i>	
Technical Requirements for the Implementation of an Experience Base	87
<i>Mikael Broomé, Per Runeson</i>	
Proactive Knowledge Delivery for Enterprise Knowledge Management	103
<i>Andreas Abecker, Ansgar Bernardi, Michael Sintek</i>	
Goal-Oriented and Similarity-Based Retrieval of Software Engineering Experienceware	118
<i>Christiane Gresse von Wangenheim, Klaus-Dieter Althoff, Ricardo M. Barcia</i>	
A Knowledge Management Lifecycle for Experience Packages on Software Engineering Technologies	142
<i>Andreas Birk, Felix Kröschel</i>	

Chapter 3: Applications

Knowledge Management at a Software House An Experience Report	163
<i>Peter Brössler</i>	
“Talk to Paula and Peter – They Are Experienced” - The Experience Engine in a Nutshell	171
<i>Conny Johansson, Patrik Hall, Michael Coquard</i>	
Push or Pull: Two Cognitive Modes of Systematic Experience Transfer at DaimlerChrysler	186
<i>Eva Wieser, Frank Houdek, Kurt Schneider</i>	
Collecting, Storing and Utilizing Information about Improvement Opportunities: A Discussion of the Non-Technological Barriers to Success	205
<i>Henrik M. Gjøzver</i>	
Transferring and Evolving Experience: A Practical Approach and Its Application on Software Inspections	210
<i>Frank Houdek, Christian Bunse</i>	