# Managing Corporate Information Systems Evolution and Maintenance

## Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Author(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Chapter I</td>
<td>Managing Corporate Information Systems Evolution and Maintenance</td>
<td>Ned Chapin, InfoSci Inc., USA</td>
</tr>
<tr>
<td>Chapter II</td>
<td>Design for Evolution: Fostering Continuity and Responding to Change</td>
<td>Darren Dalcher, Middlesex University, UK</td>
</tr>
<tr>
<td>Chapter III</td>
<td>On the Maturity of Software Maintenance and Other IT Services</td>
<td>Frank Niessink, Software Engineering Research Centre, The Netherlands</td>
</tr>
<tr>
<td>Chapter IV</td>
<td>Upfront Corrective Maintenance at the Front-End Support Level</td>
<td>Mira Kajko-Mattsson, Stockholm University/Royal Institute of Technology, Sweden</td>
</tr>
<tr>
<td>Chapter V</td>
<td>Evolving Legacy System Features into Fine-Grained Components</td>
<td>Alok Mehta, American Financial Systems, Inc., USA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>George T. Heineman, WPI Computer Science Department, USA</td>
</tr>
<tr>
<td>Chapter VI</td>
<td>Reengineering Legacy Systems Towards Web Environments</td>
<td>Ying Zou, Queen’s University, Canada</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kostas Kontogiannis, University of Waterloo, Canada</td>
</tr>
</tbody>
</table>
Chapter VII
Applying Patterns for Reengineering to the Web .................................................... 167
Uwe Zdun, Vienna University of Economics, Austria

Chapter VIII
Architectural Slicing to Support System Evolution ................................................. 197
Jianjun Zhao, Fukuoka Institute of Technology, Japan
Limin Xiang, Kyushu Sangyo University, Japan

Chapter IX
An Open Architecture for Visual Reverse Engineering .......................................... 211
Alexandru C. Telea, Eindhoven University of Technology, The Netherlands

Chapter X
Software Architecture Analysis and Reconstruction .............................................. 228
Kamran Sartipi, McMaster University, Canada
Kostas Kontogiannis, University of Waterloo, Canada

Chapter XI
Evolution and Maintenance of Web Sites: A Product Line Model ......................... 255
Rafael Capilla, Universidad Rey Juan Carlos, Spain
Juan C. Dueñas, Universidad Politécnica de Madrid, Spain

Chapter XII
Software Maintenance of Process Modeling and Analysis ...................................... 272
Zeljka Car, University of Zagreb, Croatia

Chapter XIII
Evolving Legacy Systems Towards E-Business ..................................................... 295
Lerina Aversano, RCOST - University of Sannio, Italy
Raffaele Esposito, RCOST - University of Sannio, Italy
Teresa Mallardo, RCOST - University of Sannio, Italy
Maria Tortorella, RCOST - University of Sannio, Italy

Chapter XIV
Business Oriented Systems Maintenance Management ........................................... 326
Malin Nordström, Linkooping University, Sweden
Tommy Welander, Pål AB, Sweden

Chapter XV
Reducing IS Maintenance by Improving the Quality of IS Development Processes
and Practices .......................................................................................................... 345
Evan W. Duggan, University of Alabama, USA
About the Editors ................................................................. 364
About the Authors .............................................................. 365
Index ......................................................................................... 371