Table of Contents

Preface ................................................................................................................................................xiii

Chapter 1
An Empirical Study of Open Source Software Usability The Industrial Perspective ....................... 1
  Arif Raza, University of Western Ontario, Canada
  Luiz Fernando Capretz, University of Western Ontario, Canada
  Faheem Ahmed, United Arab Emirates University, UAE

Chapter 2
Factors Affecting the Development of Absorptive Capacity in the Adoption of Open Source Software .......................................................... 18
  Kris Ven, University of Antwerp, Belgium
  Peter De Bruyn, University of Antwerp, Belgium

Chapter 3
The Ontology of the OSS Business Model: An Exploratory Study......................................................... 40
  Spyridoula Lakka, University of Athens, Greece
  Teta Stamati, University of Athens, Greece
  Christos Michalakelis, University of Athens, Greece
  Dracoulis Martakos, University of Athens, Greece

Chapter 4
OSS-TMM: Guidelines for Improving the Testing Process of Open Source Software .......................... 59
  Sandro Morasca, Università degli Studi dell’Insubria, Italy
  Davide Taibi, Università degli Studi dell’Insubria, Italy
  Davide Tosi, Università degli Studi dell’Insubria, Italy

Chapter 5
Are Developers Fixing Their Own Bugs? Tracing Bug-Fixing and Bug-Seeding Committers ............ 79
  Daniel Izquierdo-Cortazar, Universidad Rey Juan Carlos, Spain
  Andrea Capiluppi, University of East London, UK
  Jesus M. Gonzalez-Barahona, Universidad Rey Juan Carlos, Spain
Chapter 6
M.M. Mahbubul Syeed, Tampere University of Technology, Finland
Timo Aaltonen, Nokia Research Center, Finland
Imed Hammouda, Tampere University of Technology, Finland
Tarja Systä, Tampere University of Technology, Finland

Chapter 7
To Fork or Not to Fork: Fork Motivations in SourceForge Projects ............................................................ 142
Linus Nyman, Hanken School of Economics, Finland
Tommi Mikkonen, Tampere University of Technology, Finland

Chapter 8
Software Reuse in Open Source: A Case Study ............................................................................................. 151
Andrea Capiluppi, Brunel University, UK
Klaas-Jan Stol, Lero (The Irish Software Engineering Research Centre), University of Limerick, Ireland
Cornelia Boldyreff, University of East London, UK

Chapter 9
Modding as an Open Source Approach to Extending Computer Game Systems ........................................... 177
Walt Scacchi, University of California, Irvine, USA

Chapter 10
Measuring Open Source Quality: A Literature Review ................................................................................ 189
Claudia Ruiz, Georgia State University, USA
William Robinson, Georgia State University, USA

Chapter 11
Analyzing OSS Project Health with Heterogeneous Data Sources .............................................................. 207
Wikan Danar Sunindyo, Vienna University of Technology, Austria & Bandung Institute of Technology, Indonesia
Thomas Moser, Vienna University of Technology, Austria
Dietmar Winkler, Vienna University of Technology, Austria
Stefan Biffl, Vienna University of Technology, Austria

Chapter 12
The Influence of Open Source Software Volunteer Developers’ Motivations and Attitudes on Intention to Contribute ......................................................................................................................... 231
Chorng-Guang Wu, Yuan Ze University, Taiwan
James H. Gerlach, University of Colorado at Denver, USA
Clifford E. Young, University of Colorado at Denver, USA
Chapter 13
Framework for Graphical User Interfaces of Geospatial Early Warning Systems .................................. 257

Martin Hammitzsch, Helmholtz Centre Potsdam, GFZ German Research Centre for
Geosciences, Germany

Compilation of References .................................................................................................................................. 273

About the Contributors ........................................................................................................................................ 300

Index................................................................................................................................................................ 307