# Table of Contents

**Foreword** ............................................................................................................................................. xvi

**Preface** ............................................................................................................................................... xvii

**Acknowledgment** ............................................................................................................................... xxii

### Section 1

**Integrating Usability Methods in the Web Development Process**

**Chapter 1**
Supporting Web Developers in Evaluating Usability and Identifying Usability Problems .................. 1  
   Mikael B. Skov, Aalborg University, Denmark  
   Jan Stage, Aalborg University, Denmark

**Chapter 2**
A Structured Methodology for Developing 3D Web Applications ....................................................... 15  
   Juan Manuel González-Calleros, Université catholique de Louvain, Belgium  
   Jean Vanderdonckt, Université catholique de Louvain, Belgium  
   Jaime Muñoz-Arteaga, Universidad Autónoma de Aguascalientes, México & CENIDET, México

**Chapter 3**
A Case Study of Usability Engineering in the Defence Industry .......................................................... 44  
   Steve Hogg, SELEX Sensors and Airborne Systems Limited, Scotland  
   Patrik O’Brien Holt, Robert Gordon University, Scotland  
   Jim Aitchison, SELEX Sensors and Airborne Systems Limited, Scotland

**Chapter 4**
   Matija Pipan, Jozef Stefan Institute, Slovenia  
   Tanja Arh, Jozef Stefan Institute, Slovenia  
   Borka Jerman Blažič, Jozef Stefan Institute, Slovenia
Chapter 5
Usability Techniques for Interactive Software and Their Application in E-Commerce .................. 81
Shawren Singh, University of South Africa, South Africa

Chapter 6
Development and Evaluation of a Methodology for Developing Marketing Websites.................. 103
Tomayess Issa, Curtin University of Technology, Australia
Martin West, Curtin University of Technology, Australia
Andrew Turk, Murdoch University, Australia

Section 2
Universal Usability

Chapter 7
Integrating Accessibility Evaluation into Web Engineering Processes........................................ 124
Christopher Power, University of York, UK
André Pimenta Freire, University of York, UK
Helen Petrie, University of York, UK

Chapter 8
Usability Methodologies for Spoken Dialogue Web Interfaces................................................. 149
Dimitris Spiliotopoulos, University of Athens, Greece
Georgios Kouroupetroglou, University of Athens, Greece

Chapter 9
Website Accessibility and the Role of Accessibility Statements ............................................... 166
C.M. Parkinson, Loughborough University, UK
Wendy Olphert, Loughborough University, UK

Chapter 10
Considering the Perceptual Implications of Auditory Rich Content on the Web ...................... 191
Flaithri Neff, University College Cork, Ireland
Aidan Kehoe, University College Cork, Ireland
Ian Pitt, University College Cork, Ireland

Chapter 11
A Usability Guide to Intelligent Web Tools for the Literacy of Deaf People ............................. 210
Tania di Mascio, University of L’Aquila, Italy
Rosella Gennari, Free University of Bozen-Bolzano, Italy
Section 3
Theoretical Approaches

Chapter 12
Social Research Methods Used in Moving the Traditional Usability Approach Towards a User-Centered Design Approach
Horia D. Pitariu, Babes-Bolyai University, Romania
Daniela M. Andrei, Babes-Bolyai University, Romania
Adriana M. Guran, Babes-Bolyai University, Romania

Chapter 13
A Theoretical Framework Measuring the Usability of Retail Sites
Konstantina Vassilopoulou, Harokopio University, Greece
Kathy K. Keeling, University of Manchester, UK
Linda A. Macaulay, University of Manchester, UK

Chapter 14
The Influence of E-Commerce Website Colors on Usability
Jean-Eric Pelet, ISG Paris, IEMN Nantes, France

Section 4
Usability Methods and Techniques

Chapter 15
Whose Questionnaire Is It, Anyway?
Andrew Saxon, Birmingham City University, UK
Shane Walker, Birmingham City University, UK
David Prytherch, Birmingham City University, UK

Chapter 16
DEPTH: A Method and a Web-Based Tool for Designing and Executing Scenario-Based Usability Inspections of E-Systems
Petros Georgiakakis, ITisART.Ltd, Greece
Symeon Retalis, University of Piraeus, Greece

Chapter 17
Applying the WDP Technique to Usability Inspections in Web Development Organizations
Tayana Conte, Federal University of Amazonas, Brazil
Verónica T. Vaz, PESC – COPPE/UFRJ, Brazil
Jobson Massolar, PESC – COPPE/UFRJ, Brazil
Andrew Bott, Fundação COPPETEC, Brazil
Emilia Mendes, University of Auckland, New Zealand
Guilherme H. Travassos, PESC – COPPE/UFRJ, Brazil
Chapter 18
Multiple-User Simultaneous Testing: Experience with Two Methods ................................................. 345
   Borchuluun Yadamsuren, University of Missouri, USA
   Anindita Paul, University of Missouri, USA
   Sanda Erdelez, University of Missouri, USA
   Joi L. Moore, University of Missouri, USA

Compilation of References ................................................................................................................... 357

About the Contributors ......................................................................................................................... 398

Index................................................................................................................................................... 410