# Table of Contents

### Preface

Preface ........................................................................................................................................... xxiii

### Acknowledgment

Acknowledgment .............................................................................................................................. xxxi

### Section 1

#### Models, Applications and Solutions

**Chapter 1**
Measuring the Impact of an ERP Project at SMEs: A Framework and Empirical Investigation........ 1

*Maria Argyropoulou, Brunel University, UK*

*George Ioannou, Athens University of Economics and Business, Greece*

*Dimitrios N. Koufopoulos, Brunel University, UK*

*Jaideep Motwani, Grand Valley State University, USA*

**Chapter 2**
Information System Conversion in SMEs ....................................................................................... 15

*Efrem G. Mallach, University of Massachusetts Dartmouth, USA*

**Chapter 3**
Business Process Management as a Critical Success Factor in EIS Implementation......................... 24

*Vladimír Modrák, Technical University of Košice, Slovakia*

**Chapter 4**
Product Lifecycle Management: State-of-the-Art and Future Perspectives ................................... 37

*Wai M. Cheung, University of Bath, UK*

*Dirk Schaefer, Georgia Institute of Technology, USA*

**Chapter 5**
ERP Systems Supporting Lean Manufacturing in SMEs................................................................. 56

*Pritish Halgeri, Kansas State University, USA*

*Roger McHaney, Kansas State University, USA*

*Z. J. Pei, Kansas State University, USA*
Chapter 6
A Forecasting Concept for Virtual Organisations Supporting SMEs .............................................. 76
   Jens Eschenbächer, BIBA GmbH, Germany
   Heiko Duin, BIBA GmbH, Germany

Chapter 7
Business Integration Model in Services Sector SMEs................................................................. 102
   Snežana Pantelić, The Mihailo Pupin Institute, Serbia

Chapter 8
Conducting Multi-Project Business Operations in SMEs and IS Support.............................. 122
   Igor Vrečko, University of Maribor, Slovenia
   Anton Hauc, University of Maribor, Slovenia
   Vesna Čančer, University of Maribor, Slovenia
   Igor Perko, University of Maribor, Slovenia

Chapter 9
An ERP Adoption Model for Midsize Businesses ................................................................. 153
   Fahd Alizai, Victoria University, Australia
   Stephen Burgess, Victoria University, Australia

Chapter 10
Enterprise Information Systems for Business Integration in Global International
Cooperations of Collaborating Small and Medium Sized Organisations ..................................... 175
   P. H. Osanna, Vienna University of Technology, Austria
   N. M. Durakbasa, Vienna University of Technology, Austria
   M. E. Yurci, YILDIZ Technical University, Turkey
   J. M. Bauer, National University of Lomas Zamora, Argentina

Section 2
Supporting Technologies and Tools

Chapter 11
Software for Small-to-Medium Enterprises................................................................................... 188
   Jaroslav Král, Charles University, Czech Republic and Masaryk University, Czech Republic
   Michal Žemlička, Charles University, Czech Republic
Chapter 12
State of the Art Solutions in Enterprise Interoperability .......................................................... 201
Silke Balzert, Institute for Information Systems at German Research Center for Artificial
Intelligence, Germany
Thomas Burkhart, Institute for Information Systems at German Research Center for
Artificial Intelligence, Germany
Dirk Werth, Institute for Information Systems at German Research Center for Artificial
Intelligence, Germany
Michal Laclavík, Institute of Informatics, Slovak Academy of Sciences, Slovakia
Martin Šeleng, Institute of Informatics, Slovak Academy of Sciences, Slovakia
Nikolay Mehandjiev, University of Manchester, UK
Martin Carpenter, University of Manchester, UK
Iain Duncan Stalker, University of Teesside, UK

Chapter 13
Communication Issues for Small and Medium Enterprises: Provider and Customer
Perspectives ................................................................................................................................. 230
Mirjana D. Stojanovic, University of Belgrade, Serbia
Vladanka S. Acimovic-Raspopovic, University of Belgrade, Serbia

Chapter 14
Selecting Appropriate Communication Tools to Support Teams’ Creative Processes in SMEs............ 252
Hélder Fanha Martins, Lisbon Polytechnic Institute - Lisbon School of Accounting and
Administration, Portugal
Maria João Ferro, Lisbon Polytechnic Institute - Lisbon School of Accounting and
Administration, Portugal

Section 3
Managerial and Organizational Issues

Chapter 15
Enterprise Information Systems: Aligning and Integrating Strategy, Technology,
Organization and People ........................................................................................................... 271
Paul T. Kidd, Cheshire Henbury, UK

Chapter 16
Developing and Customizing Federated ERP Systems .............................................................. 286
Daniel Lübke, Leibniz Universität Hannover, Germany
Jorge Marx Gómez, University Oldenburg, Germany

Chapter 17
EIS Systems and Quality Management ..................................................................................... 300
Bart H.M. Gerritsen, TNO Netherlands Organization for Applied Scientific Research,
The Netherlands
Chapter 18
e-Impresa: A System Dynamics Strategic Model to Evaluate SME Marketing On Line
Investment........................................................................................................................................... 326
Habib Sedehi, Rome University “La Sapienza,” Italy

Chapter 19
Preparedness of Small and Medium-Sized Enterprises to Use Information and Communication
Technology as a Strategic Tool ........................................................................................................... 342
Klara Antlova, Technical University, Czech Republic

Section 4
Critical Success Factors and Case Studies

Chapter 20
Process Re-Engineering Success in Small and Medium Sized Enterprises........................................... 363
Jeffrey Chang, London South Bank University, UK
Margi Levy, University of Warwick, UK
Philip Powell, University of Bath, UK and University of Groningen, The Netherlands

Chapter 21
Challenges and Trends Towards an Effective Application of ERP and SCM
Systems in SMEs ................................................................................................................................... 376
Dimitrios Gagalis, Technological Educational Institute of West Macedonia, Greece
Panayiotis Tahinakis, University of Macedonia Economic and Social Sciences, Greece
Nicolaos Protoperos, University of Macedonia Economic and Social Sciences, Greece
Dimitrios Ginoglou, University of Macedonia Economic and Social Sciences, Greece

Chapter 22
Contrasting Approaches to Preparedness: A Reflection on Two Case Studies ....................... 400
Lorraine Warren, University of Southampton, UK
Ted Fuller, Lincoln University, UK

Chapter 23
Critical Success Factors (CSFs) for Enterprise Resource Planning (ERP) Solution
Implementation in SMEs: What Does Matter for Business Integration ........................................... 412
Simona Sternad, University of Maribor, Slovenia
Samo Bobek, University of Maribor, Slovenia
Zdenko Dezelak, University of Maribor, Slovenia
Ana Lampret, SRC.SI, Slovenia
Chapter 24
Enterprise Resource Planning (ERP) Embedding: Building of Software/Enterprise Integration

Dominique Vinck, Université P. Mendès, France
Igor Rivera-Gonzales, Instituto Politécnico Nacional, México
Bernard Penz, Institut National Polytechnique, France

Chapter 25
The Management of CRM Information Systems in Small B2B Service Organisations: A Comparison between French and British Firms

Călin Gurău, GSCM – Montpellier Business School, France

Chapter 26
Elements that Can Explain the Degree of Success of ERP Systems Implementation

Carmen de Pablos Heredero, Rey Juan Carlos University, Spain
Mónica de Pablos Heredero, Rey Juan Carlos University, Spain

Chapter 27
Change Management Strategies for ERP Implementation in SME and a Case Study in Turkey: Anadolu Bilişim Hizmetleri (ABH) Success Story

Özalp Vayvay, Marmara University, Istanbul, Turkey
İlhan Derman, ABH, Istanbul, Turkey
Ergin Beceren, ABH, Istanbul, Turkey

Compilation of References

About the Contributors

Index