# Table of Contents

Preface .................................................................................................................................................. xxii

Acknowledgment .................................................................................................................................... xxxii

Section 1
E-Government Adoption: Issues, Challenges, Experiences

Chapter 1
Smart Government: Opportunities and Challenges in Smart Cities Development ......................... 1
Carlos E. Jiménez, IEEE Computer Society E-Government STC
Francisco Falcone, IEEE Computer Society E-Government STC
Agustí Solanas, IEEE Computer Society E-Government STC
Héctor Puyosa, IEEE Computer Society E-Government STC
Saleem Zoughbi, IEEE Computer Society E-Government STC
Federico González, IEEE Computer Society E-Government STC

Chapter 2
Big Data and Innovation in the Delivery of Public Services: The Case of Predictive Policing in Kent .................................................................................................................................................... 20
Alberto Asquer, SOAS, University of London, UK

Chapter 3
If We Build It, Will They Come? An Appreciation of the Microfoundations of E-Government ....... 38
Michael J. Ahn, University of Massachusetts, USA
John McNutt, University of Delaware, USA

Chapter 4
Telecentres as a Medium for Good Governance in Rural India ......................................................... 56
Gaurav Mishra, Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), India

Chapter 5
Ensuring Continued Usage of an E-Government Service in Malaysia: The Role of Perceived Usefulness and User Satisfaction ........................................................................................................ 73
Santhanamery Thominathan, Universiti Teknologi MARA, Malaysia
Thurasamy Ramayah, Universiti Sains Malaysia, Malaysia
Section 2
Business Process Modeling for E-Government Services

Chapter 6
Raising Citizen-Government Communication with Business Process Models ........................................... 92
Renata Araujo, Federal University of the State of Rio de Janeiro, Brazil
Claudia Cappelli, Federal University of the State of Rio de Janeiro, Brazil
Priscila Engiel, Pontifical Catholic University of Rio de Janeiro, Brazil

Chapter 7
Towards the Integration of E-Government Process in the University of Murcia: Business Process Strategy ................................................................................................................................................ 107
Jesús D. Jiménez Re, Universidad de Murcia, Spain
M. Antonia Martínez-Carreras, Universidad de Murcia, Spain

Section 3
Harnessing the Citizen and E-Government Collective Intelligence

Chapter 8
Collective Intelligence in a Computer-Mediated Environment ................................................................. 125
Luigi Lancieri, University of Lille1, France

Chapter 9
Open Social Innovation ............................................................................................................................... 144
Teresa Cristina Monteiro Martins, Universidade Federal de Lavras, Brazil
Paulo Henrique de Souza Bermejo, Universidade Federal de Lavras, Brazil

Chapter 10
E-Government Documents and Data Clustering ...................................................................................... 164
Goran Šimić, University of Defense, Serbia

Chapter 11
Semantic Framework for an Efficient Information Retrieval in the E-Government Repositories ...... 192
Antonio Martín, Universidad de Sevilla, Spain
Carlos León, Universidad de Sevilla, Spain

Chapter 12
The German Electronic Identity Card: Lessons Learned .............................................................................. 214
Christoph Sorge, CISPA and Institute of Legal Informatics, Saarland University, Germany

Chapter 13
Sentiment Analysis, Social Media, and Public Administration .............................................................. 231
Daniel José Silva Oliveira, Universidade Federal de Lavras (UFLA), Brazil
Paulo Henrique de Souza Bermejo, Universidade Federal de Lavras (UFLA), Brazil
Pamela Aparecida dos Santos, Universidade Federal de Lavras (UFLA), Brazil
Section 4
E-Health: Issues and Solutions

Chapter 14
Privacy-Friendly Management of Electronic Health Records in the eHealth Context .............. 251
Milica Milutinovic, KU Leuven, Belgium
Bart De Decker, KU Leuven, Belgium

Chapter 15
Early Warning System and Adaptation Advice to Reduce Human Health Consequences of
Extreme Weather Conditions and Air Pollution ................................................................. 265
Dragan Bogdanović, State University of Novi Pazar, Serbia
Konstansa Lazarević, State University of Novi Pazar, Serbia

Chapter 16
E-Health: Current Status and Future Trends ........................................................................ 302
Virginie Felizardo, University of Beira Interior, Covilhã, Portugal
Paula Sousa, University of Beira Interior, Covilhã, Portugal
Daniel Sabugueiro, University of Beira Interior, Covilhã, Portugal
Celina Alexandre, University of Beira Interior, Covilhã, Portugal
Rafael Couto, University of Beira Interior, Covilhã, Portugal
Nuno Garcia, University of Beira Interior, Covilhã, Portugal & Universidade Lusófona de
Humanidades e Tecnologias, Lisbon, Portugal
Ivan Pires, University of Beira Interior, Covilhã, Portugal

Section 5
Government-to-Business and -Citizen Communications and Services

Chapter 17
Evaluating E-Government Initiatives: An Approach Based upon the Appropriation of Tangible
and Intangible Benefits ....................................................................................................... 328
Antonio Juarez Alencar, Federal University of Rio de Janeiro (UFRJ), Brazil
Marcelo Carvalho Fernandes, Federal University of Rio de Janeiro (UFRJ), Brazil
Eber Assis Schmitz, Federal University of Rio de Janeiro (UFRJ), Brazil
Alexandre Luis Correa, Federal University of the State of Rio de Janeiro (UNIRIO), Brazil

Chapter 18
Impact of Local Self-Government Institutions on Creating a Business-Friendly Environment:
Multi-Criteria Analysis ...................................................................................................... 353
Jelena Stanković, University of Niš, Faculty of Economics, Serbia
Igor Novaković, University in Pristina/Kosovska Mitrovica, Serbia
Chapter 19
Towards a Citizen-Centric E-Government Service Index Model: Developments and Impediments within the Egyptian Context ................................................................. 374

Mohamed R. Zakaria, Al Ghurair University, UAE
Tarek R. Gebba, Al Ghurair University, UAE
Mohamed Gamal Aboelmaged, Ain Shams University, Egypt

Compilation of References ........................................................................................................... 396

About the Contributors ............................................................................................................... 441

Index ......................................................................................................................................... 454