Contents

| 1 | eGov Framework | | | | | | |
|---|----------------|----------------|--|----------|--|--|--|
| | 1.1 | The L | isbon Declaration | 2 | | | |
| | 1.2 | Defini | tion of eDemocracy and eGovernment | 3 | | | |
| | 1.3 | Comp | onents of the eGovernment Framework | | | | |
| | 1.4 | Differe | entiation from eBusiness and eCommerce | 5 | | | |
| | 1.5 | | ter Overview | ç | | | |
| | 1.6 | | graphical Notes | 12 | | | |
| 2 | eAssistance 1 | | | | | | |
| | 2.1 | | | | | | |
| | 2.2 | | opment of the Web 2.0 | 16 17 | | | |
| | 2.3 | Catalo | og for Municipality Web Sites | 19 | | | |
| | 2.4 | Docia | n of eGovernment Portals | 21 | | | |
| | 2.5 | | r-Free Web Access | 23 | | | |
| | 2.6 | | y Assurance in the Internet | 25 | | | |
| | 2.7 | | graphical Notes | 27 | | | |
| | 2.8 | | Study—Handicapped Adapted Internet Use and Results | 2.1 | | | |
| | 2.0 | | Swiss Study on Accessibility | 28 | | | |
| | | 2.8.1 | Background: More Independence | 20 | | | |
| | | 2.0.1 | for Handicapped People | 28 | | | |
| | | 2.8.2 | Case Study—Public Web Sites Often | 20 | | | |
| | | 2.0.2 | Not Barrier-Free | 29 | | | |
| | | 2.8.3 | Examples of Barrier-Free Web Design | 30 | | | |
| | | | | 31 | | | |
| | | 2.8.4 | Well-Designed Navigation with Lists | 31 | | | |
| | | 2.8.5 | Correct Separation of Content and Layout | 32 | | | |
| | | 2.8.6 | Clear Link Targets | | | | |
| | | 2.8.7 | Well-Designed Headlines | 32 | | | |
| | | 2.8.8 | Barrier-Free CAPTCHA | 34 | | | |
| 3 | ePro | eProcurement 3 | | | | | |
| | 3.1 | Intern | et-Based Procurement Process | 38 | | | |
| | 3.2 | Procu | rement Model Seller-Side | 40 | | | |
| | 3.3 | Procu | rement Model Buyer-Side | 41 | | | |
| | 3.4 | Marke | etplace Procurement | 43 | | | |
| | 3.5 | Public | Offering via Internet | 44 | | | |

vii



viii Contents

| | 3.6 3.7 3.8 3.9 | Conducting Auctions Desktop Purchasing Bibliographical Notes Case Study: Inverse Auctions at the Centralized Procurement Agency of Swiss Federal Railways 3.9.1 Background 3.9.2 Case Studies of Inverse Auctions in the SBB 3.9.3 Case Example A—Procurement of a Service 3.9.4 Case Example B—Procurement of Clothing 3.9.5 Case Example C—Procurement of Working Clothes 3.9.6 Case Example D—Procurement of a Service | 46 48 49 50 50 51 52 53 54 |
|---|--|--|--|
| | | 3.9.7 Opportunities and Risks | 54 |
| 4 | eSe 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 | Technical, Organizational, and Semantic Interoperability Electronic Governmental Services for Citizens eGovernment Services for Businesses Municipality Product Plan eHealth Architecture for Mobile Services Capability Maturity Model for the Benchmarking Bibliographical Notes Case Study—Basic Components and Main Applications for the Electronic Health Record in Austria 4.8.1 Background 4.8.2 Case Study 4.8.3 Opportunities and Risks | 57 58 60 62 62 65 67 70 71 71 75 |
| 5 | eCo 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 | Electronic Contracts Generic Services for the Negotiation Process Identity Management Asymmetric Encryption Sealing Electronic Documents with Digital Signatures Public Key Infrastructure Legal Aspects Bibliographical Notes Case Study—Face Recognition in the Biometric Passport 5.9.1 Background 5.9.2 Case study—The Biometric Data in Passports 5.9.3 Opportunities 5.9.4 Risks | 81 82 83 84 86 88 90 92 93 95 95 95 |
| 6 | eSe 6.1 6.2 6.3 | ttlement Sub-Steps of a Supply Chain Classification of Web-Based Payment Systems Online Versus Offline Distribution | 103 104 105 108 |

Contents ix

| | 6.4 6.5 6.6 6.7 | Protection of Personal Data | 112 113 115 117 | | | |
|---|--------------------------|--|--------------------------|--|--|--|
| | 6.8 | Case Study—Safeguards on Data Exchange of Salzburg Research | 118 118 | | | |
| | | Defense Measures | 118 122 | | | |
| 7 | eCo | eCollaboration 12 | | | | |
| • | 7.1 | | | | | |
| | 7.2 | Content Management | 126 128 | | | |
| | 7.3 | Wiki Tools | 131 | | | |
| | 7.4 | Use of Weblogs | 133 | | | |
| | 7.5 | Collaborative Working Environment | 135 | | | |
| | 7.6 | Virtual Organization and Forms of Cooperation | 138 | | | |
| | 7.7 | Bibliographical Notes | 140 | | | |
| | 7.8 | Case Study—Learning Environment Virtual Campus | | | | |
| | | at the University of Hagen | 141 | | | |
| | | 7.8.1 Background | 141 | | | |
| | | 7.8.2 Case Study—Characteristics of a Virtual Campus | 141 | | | |
| | | 7.8.3 Changes in Learning and Teaching | 142 | | | |
| | | 7.8.4 Communication and Interaction | 142 | | | |
| | | 7.8.5 Cooperation | 143 | | | |
| | | 7.8.6 Exams and Examination Regulations | 144 | | | |
| | | 7.8.7 Supervision Relationship | 144 | | | |
| | | 7.8.8 Changes in the Organization | 145 | | | |
| | | 7.8.9 Opportunities and Risks | 146 | | | |
| 8 | eDe | Democracy 14 | | | | |
| | 8.1 | Pyramid of Types of Participation | | | | |
| | 8.2 | Variety of Electronic Voting and Elections | 151 | | | |
| | 8.3 | Process Steps for eVoting and eElection | | | | |
| | 8.4 | Operation of Electronic Voting and Elections | | | | |
| | 8.5 | Analysis and Visualization of Multidimensional Data 15 | | | | |
| | 8.6 | Steps to Public Memory | 160 | | | |
| | 8.7 | Bibliographical Notes | | | | |
| | 8.8 | Case Study—Goals and Implementation of a Web-Based Elec- | | | | |
| | | toral Assistance System for Parliamentary Elections | 163 | | | |
| | | 8.8.1 Background—The Problem of Information on the Electoral | 163 | | | |

x Contents

| | | 8.8.2 | Case Smartvote—Choosing Custom-Made Politicians by | 400 | | | |
|------------------------------|---|---------|--|-----|--|--|--|
| | | | Mouse Click | 163 | | | |
| | | 8.8.3 | Opportunities and Risks for Online Electoral Aids | 166 | | | |
| 9 | ity | 169 | | | | | |
| | 9.1 | Push v | vs. Pull Communication Strategies | 170 | | | |
| 9.2 Multi-Channel Management | | | | 171 | | | |
| | 9.3 | Establ | ishment of a Citizen Communication Center | 174 | | | |
| | 9.4 | Develo | opment Model for Online Citizen | 175 | | | |
| | 9.5 Performance Review for Public Web Platforms and Portals . | | | | | | |
| | 9.6 | Tools t | for Community Building | 181 | | | |
| | 9.7 | | graphical Notes | 183 | | | |
| | 9.8 | | Study—Medical Communication Center | 185 | | | |
| | | 9.8.1 | Background | 185 | | | |
| | | 9.8.2 | Case Medgate | 185 | | | |
| | | 9.8.3 | Chances and Risks | 188 | | | |
| 10 | Kno | wledge | Society | 191 | | | |
| | | _ | tralization in the New Public Management | 192 | | | |
| | | | d the Information and Knowledge Society | 194 | | | |
| | | | Knowledge-Based Databases | 196 | | | |
| | | | opment of a Knowledge Society | 198 | | | |
| | | | ers and Risks of a Knowledge Society | 200 | | | |
| | | | Rules in the Knowledge Society | 202 | | | |
| | | | graphical Notes | 204 | | | |
| GI | Glossary | | | | | | |
| Bil | Bibliography | | | | | | |
| lne | index | | | | | | |