Contents

Figures and Tables ................................................................. x
Foreword, by William H. Dutton ................................. xi
Acknowledgments ................................................................. xvii
Preface ................................................................. xix

CHAPTER 1
Introduction to Social Informatics ...................................... 1
1.1 The Disconnection Between Popular and Scholarly Discussion .... 1
1.2 Defining Social Informatics ........................................ 5
1.3 The Value of Social Informatics ........................................ 8

CHAPTER 2
The Consequences of ICTs for Organizations and Social Life .... 13
2.1 The Social Nature of ICTs ........................................ 16
2.1.1 ICTs Are Interpreted and Used in Different Ways
by Different People ........................................ 16
2.1.2 ICTs Enable and Constrain Social Actions and
Social Relationships ........................................ 20
2.1.3 ICTs Provide a Means to Alter Existing Control Structures .... 21
2.1.4 There Can Be Negative Consequences of ICT
Developments for Some Stakeholders ...................... 23
2.2 The Technical Nature of ICTs ...................................... 26
2.2.1 ICTs Play Both Communicative and Computational Roles ... 26
2.2.2 There Are Important Temporal and Spatial Dimensions
of ICT Consequences ........................................ 27
2.2.3 ICTs Rarely Cause Social Transformations ............... 28
2.3 The Institutional Nature of ICTs ................................... 29
2.3.1 Social and Technical Consequences Are Embedded
in Institutional Contexts ........................................ 29
2.3.2 ICTs Often Have Important Political Consequences .... 29

CHAPTER 3
Social Informatics for Designers, Developers, and Implementers
of ICT-Based Systems ...................................................... 33
3.1 Understanding the Social Design of ICTs .......................... 33
  3.1.1 The Historical Premise of Designer-Focused Systems .......... 33
  3.1.2 The Configurational Nature of ICT-Based Systems ............. 35
  3.1.3 Usability Is a Partial Response to Designer-Focused Approaches .................................................. 37
3.2 Principles for Social Design ........................................... 38
  3.2.1 Social Design Compared to Designer-Focused Approaches . 38
  3.2.2 Designing for a Heterogeneity of Uses, People, Contexts, and Data .................................................. 41
  3.2.3 The Designing of ICTs Continues During Their Use .......... 46
  3.2.4 There Is Agency in the Design and Deployment of ICTs ..... 48

CHAPTER 4
Social Informatics for ICT Policy Analysts .............................. 51
4.1 How Can Social Informatics Contribute to ICT Policy Analysts’ Work? ...................................................... 52
  4.1.1 How Social Informatics Can Help ................................ 53
  4.1.2 Contemporary Policy Issues from a Social Informatics Perspective .................................................. 55
  4.1.2.1 Notebook Computers Replacing Textbooks .............. 56
4.2 A Historical View of Social Informatics-Oriented Policy Analysis .... 62
  4.2.1 U.S. ICT Policy (1970–Present) .................................. 62
  4.2.1.1 U.S. Congress’s Office of Technology Assessment .... 62
  4.2.1.2 The Computer Science and Telecommunications Board .................................................. 65
  4.2.1.3 President’s Information Technology Advisory Committee .................................................. 70
  4.2.1.4 U.S. Department of Commerce ................................ 71
  4.2.2 Private ICT Research Institutes in the 1990s ..................... 74
  4.2.3 European ICT Policy Analysis (1985–Present) ............... 75
    4.2.3.1 The United Kingdom’s Programme on Information and Communication Technologies .............. 75
    4.2.3.2 European Commission’s Information Society Project Office in the 1990s ............................. 77
4.3 ICT Policy Analysis in the Next Decades ........................... 80

CHAPTER 5
Teaching Key Ideas of Social Informatics ................................. 83
5.1 Why Teach Social Informatics? ....................................... 83
5.1.1 Social Informatics Teaching in the Context of Broad Trends in Science-Oriented Education ................................. 84
5.2 Summarizing the Teaching of Social Informatics ...................... 88
  5.2.1 Current Status of Teaching Social Informatics ...................... 89
  5.2.2 Issues with the Current Status of Teaching Social Informatics ........ 90
5.3 Teaching Social Informatics ................................................. 92
  5.3.1 Key Social Informatics Ideas ........................................... 92
    5.3.1.1 The Context of ICT Use Directly Affects Their Meanings and Roles ......................................................... 92
    5.3.1.2 ICTs Are Not Value Neutral: Their Use Creates Winners and Losers ............................................................... 92
    5.3.1.3 ICT Use Leads to Multiple, and Often Paradoxical, Effects ................................................................. 93
    5.3.1.4 ICT Use Has Ethical Aspects ........................................ 93
    5.3.1.5 ICTs Are Configurable ................................................ 94
    5.3.1.6 ICTs Follow Trajectories ............................................ 94
    5.3.1.7 Co-Evolution of ICT System Design/Development/Use ................................................................. 95
  5.3.2 Tailoring Social Informatics Concepts for Specific Curricular Purposes ................................................................. 95
  5.3.3 Social Informatics as Informed Critical Thinking .................... 96
  5.3.4 Issues with Teaching Social Informatics ................................ 98
    5.3.4.1 Motivating Contemporary ICT-Oriented Educators to Value (and Include) Social Informatics Concepts and Techniques in the Curriculum ................................................. 98
    5.3.4.2 Difficulties with Synthesizing Social Informatics Literature That Is Mostly Research-Based and Spread Across Numerous Disciplines ............................................ 99
    5.3.4.3 Issues with Helping Students Integrate Social Informatics Concepts and Techniques with Their Own Experiences ................................................................. 100
    5.3.4.4 Dealing with Existing Mental Models That Students Bring to Social Informatics Topics ........................................... 100
5.4 Recommendations .................................................................. 100

CHAPTER 6
Communicating Social Informatics Research to Professional and Research Communities ...................................................... 105
  6.1 Learning from Organizational and Social Informatics .............. 106
6.2 Audience ......................................................... 107
6.3 Communicating to ICT Professional Audiences .......... 109
   6.3.1 Perceptions of the Relevance of Social Informatics
      Research .................................................. 113
6.3.2 Competition for the Attention of the ICT
      Professional Audience ............................... 117
6.3.3 Strategies for Communicating to ICT Professional Audiences ........................................ 119
   6.3.3.1 Learning About ICT Professionals ................. 120
   6.3.3.2 Redesigning the Research Focus ....................... 122
   6.3.3.3 Publicizing Social Informatics Research to
      the ICT Professional Audience ....................... 125
   6.3.3.4 Holding Regular Forums That Bring Academics
      Together with ICT Professionals ..................... 126
   6.3.3.5 Providing Continuing Education for ICT
      Professionals .......................................... 128
   6.3.3.6 Creating Research-Based “ICT Extension Services” .. 129
   6.3.3.7 Managing Competition with Research and
      Consulting Firms .................................. 131
6.4 Communicating to Academic and Research Communities . 133
   6.4.1 Audience .............................................. 133
   6.4.2 Challenges of Communicating to Academic and
      Research Communities .............................. 134
   6.4.3 Strategies for Improving Communication with Other
      Academic and Research Communities ................. 135
   6.4.3.1 Raising the Profile of Social Informatics Research .. 136
   6.4.3.2 Increasing Publishing Options for
      Social Informatics Research .......................... 138
   6.4.3.3 Taking Advantage of Easy Access to Networked
      Digital Information About Social Informatics ........ 139
   6.4.3.4 Research Initiatives to Raise the Profile of
      Social Informatics .................................. 140
   6.4.3.5 Increasing Institutional Support for
      Social Informatics Research .......................... 141
6.5 Raising the Visibility of Social Informatics .................. 142

CHAPTER 7
Conclusions ..................................................... 145
7.1 Summary of Findings, Concepts, and Issues .................... 146
    7.1.1 ICTs Are Socially Shaped .......................... 146