Contents

List of editors and contributors vii

1 The promise, application and pitfalls of big data 1
John Storm Pedersen and Adrian Wilkinson

2 Man versus cyborg 22
Vladimir Estivill-Castro

3 Big data and application 49
Patrick Mikalef

4 Big data and human resource management 69
Tobias M. Scholz

5 Big data in the energy industry 90
Petyo Bonev and Magnus Söderberg

6 A brief introduction to 'big data' and its application in tourism 107
Ali Reza Alaei and Susanne Becken

7 Big data in government: The case of 'smart cities' 133
Karl Löfgren and William Webster

8 Cyborg bureaucracy: Frontline work in digitalized labor and welfare services 149
Eric Breit, Cathrine Egeland and Ida Bring Løberg

9 Data analytics and health services quality: Implementing eHealth initiatives wisely 170
Peter Ross, Therese Kelly, Sanjeev Hiremath and Adrian Wilkinson

10 Data-driven management in practice in the digital welfare state 200
John Storm Pedersen

11 Social work in the Danish digitalized welfare state – and the use of digital technologies for professional knowledge in child services 224
Anna Olejasz Lyneborg

12 Big data in social welfare 245
Philip Gillingham

13 Big data and data governance: From the 'world of ideas' to the 'world of practice' 264
Anders Sandgaard

14 Artificial reality: The practice of analytics and big data in educational research 287
Ben Kei Daniel

15 The digital welfare state: Dataism versus relationshipism 301
John Storm Pedersen

16 Big data in political communication 325
Peter Aagaard

17 Rumour detection in social media 348
Henry Nguyen and Bela Stantic

18 Big data and professionals: What we can learn from Michael Polanyi 366
Giorgio Baruchello

Index 391