Record Nr. UNINA9910298474403321 Policy Practice and Digital Science [[electronic resource]]: Integrating **Titolo** Complex Systems, Social Simulation and Public Administration in Policy Research / / edited by Marijn Janssen, Maria A. Wimmer, Ameneh Deljoo Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-12784-5 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (435 p.) Public Administration and Information Technology, , 2512-1812;; 10 Collana Disciplina 320.014 330 351 658.514 Soggetti Public administration Management Industrial management Political communication **Public Administration** Innovation/Technology Management **Political Communication** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references at the end of each chapters. Nota di bibliografia Nota di contenuto Information and communications technology -- (ICT) -- Data -- Social media -- Research -- Computer science -- Policy modeling -- Public administration -- Policy analyses -- Information systems -- Social media. Sommario/riassunto The explosive growth in data, computational power, and social media creates new opportunities for innovating policy-making. The open data and social media movements are making large quantities of new data available. Sophisticated techniques for data gathering, visualization, and analysis have expanded our ability to understand, display and

disseminate complex temporal and spatial information to diverse

audiences. At the same time, enhancements in computational power have expanded the repertoire of instruments and tools available for studying dynamic systems and their interdependencies. Demands for more openness, transparency and participation results in the need to proactively engage stakeholders in policy making. To take advantage of these developments in the digital world, new approaches, concepts, instruments and methods are needed to handle the societal and computational complexity. This requires extensive interdisciplinary knowledge of public administration, policy analyses, information systems, complex systems and computer science. This book provides the foundation for a new interdisciplinary field, in which various traditional disciplines are blended. Both policy makers and those in charge of policy implementations acknowledge that ICT is becoming more important and is changing the policy-making process, resulting in a next generation policy-making based on ICT support. Efforts to design public policies are confronted with considerable complexity, in which (a) a large number of potentially relevant factors need to be considered, (b) a vast amount of data needs to be processed, (c) many stakeholders are involved, (d) a large degree of uncertainty exist and (e) rapidly changing circumstances may shape the policy context. This is the first comprehensive book, in which the various developments and disciplines are covered from the complete policy-making perspective. The essential characteristics of this research field are that it 1) is practice-driven 2) employs modelling techniques and 3) needs the knowledge coming from various disciplines. This book is practicedriven by taking the public policy problem as a starting point and defining what information is relevant for addressing the problem under study. Several examples in different domains are included in this book. Attention is given to modelling, simulation and visualization instruments and approaches, and comparisons between them. Finally, public administration, policy analyses, information systems, complex systems and computer science disciplines are blended in this book. .