Foreword

Policy modeling: what it is and why it matters and how emerging technologies are changing the policymaking process are at the heart of this edited volume. The volume responds to the changes being seen in the way technology and data are imagined as tools in the policy making process and how the possibilities are impacting our understanding of the policy making lifecycle.

The editors, Peter Sonntagbauer, Kawa Nazemi, Susanne Sonntagbauer, Giorgio Prister, and Dirk Burkhardt, provide a rich treatment of policy modeling and the related concepts and contextual elements that influence how we think about and consider ICTs as part of the modern policy making process. The volume provides scholars and practitioners with a well-rounded consideration of the foundations, tools and techniques, leading practices and emerging models and outlines a roadmap for ICT enabled policy lifecycle going forward.

Each section of the book deals with a specific aspect of research in the policy modeling domain providing the reader with the necessary foundation for considering ICT integration into the policy making process. Opening chapters on e-government, open government data, semantic web standards for publishing and integrating open data, and policy modeling methodologies set the stage for the book and the ongoing dialogue. A chapter on FUPOL (The Future Policy Modeling Project), a project funded under the 7th framework program of the European Union makes the transition from the context setting chapters to a specific discussion of FUPOL as a new model of policy making. FUPOL, a new and detailed policy lifecycle model builds on previous models, enhancing those models by linking to ICTs and to the specific benefits of its use for governments, citizens and other stakeholders. The unique characteristics of FUPOL and the significance of those characteristics in terms of making it “future proof” as a methodology for linking technology to the various phases of the policy making lifecycle are described.

Chapters on specific simulation techniques and software tools being used in policy modeling then provide the reader with an appreciation of the range of techniques available to policy makers and those who drive the policy design and modeling processes. Chapters on causal modeling, simulation and fuzzy logic models, among others, and their use in the policy modeling process ensure the reader has a deep appreciation for the variety of tools and techniques being employed under the umbrella of policy modeling and for enabling more active engagement of citizens in the policy making process. A chapter by Rumm, Ortner, and Löw, calls for a reflection based on new understanding of the policy making process and the role of technology. The authors provide an important contribution by encouraging the reader to step back from the specific to examine the policy making process and how an ICT system, newly considered as a tool in the process, must be designed to maximize impact on that process.
A global tour of leading practices in ICT-enabled policy making processes provides the reader with an understanding of the current state-of-the-art in many places around the world. From Zagreb, to China, Brazil, Macedonia, Singapore and beyond, the chapters in this section provide the reader with a rich selection of case examples of the use of technologies as part of the policy making process. Whether seeking to increase participation in discussions of low equity in neighborhoods in Kenya or examining an effort to foster bicycle use in cities; each chapter also brings forward new models or frameworks for thinking about and enabling the policy lifecycle. The chapter regarding Fostering Bicycle Inter-Modality in Skopje for example, by Gusev, Guseva and Veselinovska, draws on complexity science to introduce a new governance model to support the policy design and implementation lifecycle in their case study of bicycle modality in Macedonia.

Finally the book provides a living roadmap for policy making. A chapter authored by Mureddu, Osimo, Misuraca, Onori, and Armenia, draws on the work of the CROSSOVER project, also funded by the FP7, which “aims to establish the scientific and political basis for long-lasting interest and commitment to next generation policymaking.” Among other topics, the chapter outlines the opportunities for involvement in the development of the roadmap and provides the reader a bridge between the book and the larger community of scholars and practitioners focused on the future of policy modeling, policy making processes, and ICTs.

With their extensive literature reviews, rich conceptual models and compelling case studies the chapters in this volume provide an important contribution to efforts to understand recent shifts in dominant models of policy making processes and to our basket of tools, techniques, methods and models focused on ensuring data is ready and available for use, and that the integration of emerging technologies into the policy making process will deliver the expected benefits to the governance process.

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