

1. Record Nr.	UNINA9910337805903321
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Titolo	Decision Making under Deep Uncertainty [[electronic resource]] : From Theory to Practice // edited by Vincent A. W. J. Marchau, Warren E. Walker, Pieter J. T. M. Bloemen, Steven W. Popper
Pubbl/distr/stampa	Cham, : Springer Nature, 2019 Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-05252-4
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XIV, 405 p. 85 illus., 66 illus. in color.)
Disciplina	658.40301
Soggetti	Operations research Decision making Dynamics Ergodic theory Probabilities Operations Research/Decision Theory Dynamical Systems and Ergodic Theory Probability Theory and Stochastic Processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Robust Decision Making (RDM) -- Chapter 3. Dynamic Adaptive Planning (DAP) -- Chapter 4. Dynamic Adaptive Policy Pathways (DAPP) -- Chapter 5. Info-Gap (IG) Decision Theory -- Chapter 6. Engineering Options Analysis (EOA) -- Chapter 7. Robust Decision Making (RDM) Applications Water Planning and Climate Policy -- Chapter 8. Dynamic Adaptive Planning (DAP) – The Case of Intelligent Speed Adaptation -- Chapter 9. Dynamic Adaptive Policy Pathways (DAPP): From Theory to Practice -- Chapter 10. Info-Gap (IG) Robust Design of a Mechanical Latch -- Chapter 11. Engineering Options Analysis (EOA) – Applications -- Chapter 12. Decision Scaling (DS): Decision Support for Climate Change -- Chapter 13. A Conceptual Model of Planned Adaptation (PA) -- Chapter 14. DMDU into Practice: Adaptive Delta Management in The Netherlands -- Chapter 15.

Sommario/riassunto

This open access book focuses on both the theory and practice associated with the tools and approaches for decisionmaking in the face of deep uncertainty. It explores approaches and tools supporting the design of strategic plans under deep uncertainty, and their testing in the real world, including barriers and enablers for their use in practice. The book broadens traditional approaches and tools to include the analysis of actors and networks related to the problem at hand. It also shows how lessons learned in the application process can be used to improve the approaches and tools used in the design process. The book offers guidance in identifying and applying appropriate approaches and tools to design plans, as well as advice on implementing these plans in the real world. For decisionmakers and practitioners, the book includes realistic examples and practical guidelines that should help them understand what decisionmaking under deep uncertainty is and how it may be of assistance to them. Decision Making under Deep Uncertainty: From Theory to Practice is divided into four parts. Part I presents five approaches for designing strategic plans under deep uncertainty: Robust Decision Making, Dynamic Adaptive Planning, Dynamic Adaptive Policy Pathways, Info-Gap Decision Theory, and Engineering Options Analysis. Each approach is worked out in terms of its theoretical foundations, methodological steps to follow when using the approach, latest methodological insights, and challenges for improvement. In Part II, applications of each of these approaches are presented. Based on recent case studies, the practical implications of applying each approach are discussed in depth. Part III focuses on using the approaches and tools in real-world contexts, based on insights from real-world cases. Part IV contains conclusions and a synthesis of the lessons that can be drawn for designing, applying, and implementing strategic plans under deep uncertainty, as well as recommendations for future work. The publication of this book has been funded by the Radboud University, the RAND Corporation, Delft University of Technology, and Deltares.