Record Nr. UNINA9910983358603321 Autore Qudrat-Ullah H (Hassan) Titolo Navigating complexity: All and systems thinking for smarter decisions / / Hassan Qudrat-Ullah Cham, Switzerland: ,: Springer, , [2025] Pubbl/distr/stampa **ISBN** 9783031827426 3031827422 Edizione [1st ed.] Descrizione fisica 1 online resource (242 pages): illustrations (some color) Disciplina 658.4/03 Soggetti Cognition Social psychology Cognitive psychology Artificial intelligence Operations research Social Psychology Cognitive Psychology Artificial Intelligence Operations Research and Decision Theory Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references and index. Nota di bibliografia Nota di contenuto 1. Introduction: Overview of Complexity in Decision-Making -- 2. Theoretical Foundations of Complexity -- 3. Integrating Systems Thinking and AI -- 4. Tools and Techniques -- 5. Applications in Various Domains -- 6. Ethical, Social, and Practical Considerations --7. Future Directions and Innovations -- 8. Conclusion and the Way Forward. Sommario/riassunto This book, "Navigating Complexity: All and Systems Thinking for Smarter Decisions" delves into the integration of Artificial Intelligence (AI) and systems thinking to enhance decision-making in complex and dynamic environments. Aimed at professionals, researchers, and academics in fields such as management, healthcare, sustainability, and

public policy, it provides a comprehensive exploration of how these two approaches can be synergistically employed. The main topics include

the theoretical foundations of complexity science, the practical application of AI and systems thinking tools, and real-world case studies demonstrating their combined use. These topics are crucial as they address the need for advanced methodologies to navigate and manage the increasing complexity in modern decision-making scenarios. The book seeks to solve the problem of effectively managing complexity by offering innovative frameworks and models that integrate AI's data-driven capabilities with systems thinking's holistic approach. This integration is essential for improving decision-making processes across various domains, providing readers with actionable insights and tools to tackle contemporary challenges.