

1. Record Nr.	UNINA9910338726003321
Titolo	/#/ [[Shih Yu Yu T'len Jan Ch'I Hua Kung]]
Pubbl/distr/stampa	, , :
Soggetti	Chemistry - Petroleum Engineering - Petroleum Engineering
Lingua di pubblicazione	Cinese
Formato	Materiale a stampa
Livello bibliografico	Periodico
Note generali	Refereed/Peer-reviewed
2. Record Nr.	UNINA9910763589903321
Titolo	Managing Complex Tasks with Systems Thinking // edited by Hassan Qudrat-Ullah
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2023
ISBN	9783031406355 3031406354
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (xiii, 484 pages) : illustrations
Collana	Understanding Complex Systems, , 1860-0840
Disciplina	658.403
Soggetti	System theory Business logistics Operations research Complex Systems Supply Chain Management Operations Research and Decision Theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I. Introduction to Systems Thinking and its Applications -- Chapter 1. Introduction: Managing Complex Tasks with Systems Thinking -- Part II. Theoretical and Methodological Advancements -- Chapter 2. A

Systems Engineering Framework for Reliability Assurance of Subsea Oil and Gas Production Systems -- Chapter 3. Improving the Strategy for Scientific Vocations in Colombia through Participatory Modeling Based on System Dynamics -- Chapter 4. Bringing Behavioral Economics into System Dynamics: Some Challenges, Solutions, and a Path Forward -- Chapter 5. From Value Networks to Causal Loop Diagrams: Strategic Preparation for Designing Systemic Interventions in Organizations -- Part III. Applications of Systems Thinking in Education. Chapter 6. Learning Analytics and Interactive Multimedia Experience in Enhancing Student Learning Experience: A Systemic Approach -- Chapter 7. Fostering Problem-Solving Skills and Creativity in Latin America Primary Schools Through System Dynamics -- Exploring Gender Inequality and Practical Solutions for an Equitable Environment for Women in Scientific Vocations -- Chapter 8. Exploring Gender Inequality and Practical Solutions for an Equitable Environment for Women in Scientific Vocations -- Part IV. Bridging the Digital Gap with Systems Thinking -- Chapter 9. Using System Thinking for Improved Access, Equity, and Decision-Making in the Digital Age -- Chapter 10. Navigating the IT Professional Shortage with System Thinking: Practical Insights for Better Decision Making -- Part V: Addressing Agricultural Issues with Systems Thinking -- Chapter 11. Leveraging IoT and System Dynamics for Effective Cooperation in Solving Social Dilemmas in Water Management -- Chapter 12. Exploring the Systemic Causes of Land Inequality with Systems Thinking -- Chapter 13. Biosecurity Adherence Using Cooperation Mechanisms: Leveraging System Thinking for Effective Strategic Organizational Biosecurity Decision Making -- Part VI. Sustainability Science and Systems Thinking -- Chapter 14. Review on Sustainable Plastic Contents Recycling in Bangladesh: A System Dynamics Approach -- Chapter 15. The Potential Impact of ESG Spending on Public Perception of the Canadian Oil Sands -- Part VII. Dealing with the Complexity of Healthcare Systems -- Chapter 16. Improving Healthcare Policy Decisions with Systems Thinking: An Experimental Study -- Chapter 17. Understanding the Process of Production and Distribution of N95 Mask with a Systems Thinking Approach -- Chapter 18. Endangered Species-A Broad Look at Their Demographic Effects with Systems Thinking -- Chapter 19. Understanding the Dynamics of the HIV/AIDS Epidemic in China with System Dynamics -- Part VIII. Finally. Chapter 20. Conclusion and A Way Forward for Managing Complex Tasks.

## Sommario/riassunto

This book is about improving human decision making and performance in complex tasks. Utilizing systems thinking approach, this book presents innovative and insightful solutions to various managerial issues in various domains including agriculture, education, climate change, digital transformation, health care, supply chains, and sustainability. Practical insights and operational causal models are systematically presented. The key features of the didactic approach of this book are core knowledge, numerous tables and figures throughout the text, system archetypes, and causal loop models. This book serves as a text for college and university courses on Systems Thinking for Management Decision Making in Complex Tasks. Researchers use the developed “causal models” to design and evaluate various decision-aiding technologies. It is used as a source of practical information for a broad community of decision-makers, researchers, and practitioners concerned with the issue of improving human performance in complex organizational tasks.