

1. Record Nr.	UNINA9910298188903321
Titolo	Advances and Impacts of the Theory of Inventive Problem Solving : The TRIZ Methodology, Tools and Case Studies // edited by Sebastian Koziok, Leonid Chechurin, Mikael Collan
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-96532-8
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (241 pages)
Disciplina	153.43
Soggetti	Project management Quality control Reliability Industrial safety Operations research Decision making Production management Project Management Quality Control, Reliability, Safety and Risk Operations Research/Decision Theory Production
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Digital Learning Design: From Ideation via TRIZ to Implementation -- Experimental Validation of Quantum-Economic Analysis (QEA) as a Screening Tool for New Product Development -- Can Altshuller's Matrix be Skipped Using CBR and Semantic Similarity Reasoning? -- A Critical Comparison of Two Creativity Methods for Fostering Participatory Innovation: Implications to Improve TRIZ -- Problem Formulation of Screw Feeding System of Fibrous Materials Using TRIZ -- Quantifying and Leading Innovation with TRIZ Within Competitiveness Strategies -- TRIZ to Support Disruptive Innovation of Shared Bikes in China -- From Simulation to Contradictions, Different Ways to Formulate Innovation Directions -- How Problems Are Solved in TRIZ Literature: The Need for

Alternative Techniques to Individuate the Most Suitable Inventive Principles -- TRIZ to Support Creation of Innovative Shared Value Business Initiatives -- Mobile Biogas Station Design - the TRIZ Approach -- Cause-Effect Chains Analysis Using Boolean Algebra -- A Praxiological Model of Creative Actions in the Field of Mechanical Engineering -- A Long-Term Strategy to Spread TRIZ in SMEs. Analysis of Bergamo's Experience -- Lessons for TRIZ from Design Thinking & Lean 3P -- TRIZ Potential for IT Projects -- TRIZ/CrePS Approach to the Social Problems of Poverty: 'Liberty vs. Love' Is Found the Principal Contradiction of the Human Culture -- Product Development Using Heuristic-Systematic Approach: A Case Study -- TRIZ Based Problem Solving of Tile Manufacturing System -- TRIZ-Based Approach for Process Intensification and Problem Solving in Process Engineering: Concepts and Research Agenda -- Problem Definition and Identification of Contradictions in the Interdisciplinary Areas of Mechatronic Engineering.

Sommario/riassunto

This book offers a collection of cutting-edge research on the Theory of Inventive Problem Solving (TRIZ). Introduced by Genrich Altshuller in 1956, TRIZ has since been used by engineers, inventors and creators as an essential structured innovation method at businesses and organizations around the globe. The chapters of this book showcase work by selected authors from the 'TRIZ Future' conferences, which are organized by the European TRIZ Association (ETRIA). The chapters reflect an international mix of new ideas on TRIZ and knowledge-based innovation, highlight recent advances in the TRIZ community, and provide examples of successful collaboration between industry and academia. The book first introduces the reader to recent methodological innovations, then provides an overview of established and new TRIZ tools, followed by a collection of case studies and examples of TRIZ implementation in various scientific and social contexts.
