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New perspectives of TRIZ -- Mathematical Modelling and Formalization of TRIZ. Trimming for Product Design -- Improving the TRIZ creative engineering methodology to take into account the notion of the value of the idea -- VA++ - the Next Generation of Value Analysis in TRIZ -- Using MBSE for conflict managing TRIZ on a systems engineering level -- TRIZ-based Approach in Co-creating Virtual Storymaps -- Bridging Two Different Domains To Pair Their Inherent Problem-Solution Text Contents: Applications to Quantum Sensing and Biology -- Inventive Design Solutions for the Complex Social-Technical Problems in Preserving Indigenous Symbolic Visual Communications -- Exploitation of causal relation for automatic extraction of contradiction from a domain-restricted patent corpus -- Systems, Resources, and Systemic Development in TRIZ -- The Use of Publicly Available Image Search Engines to Find Solution Ideas. Efficient Use of TRIZ Information Resources -- Open Inventive Design Method (OIDM-Triz) approach for the modeling of complex systems and the resolution of multidisciplinary contradictions. Application to the exploration of innovative solutions to deal with the climate change impacts -- Market Impact Chain Analysis - MICA, new TRIZ tool -- Modular ideality for systematic segmentation -- Hypotheses analysis as a development of the System Operator method used in TRIZ -- AI in systematic innovation -- An Interactive Artificial Intelligence System for Inventive Problem-Solving -- Inventive principles extraction in inventive design using Artificial Intelligence methods -- AI based Patent analyzer for suggesting Solutive actions and graphical triggers during problem solving -- Automatic TRIZ domain mapping -- Systematic innovations supporting IT and AI -- Using NLP to Detect Tradeoffs in Employee Reviews -- TRIZ-based Approach in Capturing and Managing Indigenous Innovation and Knowledge -- The potential of creative methods for IT project management -- Modeling IT systems in TRIZ -- Modeling Software in TRIZ -- Integration of TRIZ methodologies into the digital product development process -- TRIZ for improving the maintenance process -- Adoption of Artificial Intelligence in Romania: Innovative Policies to Overpass Vulnerabilities with TRIZ and Deep-Thinking Tools -- TRIZ Applications -- Analysis of Tools Used for Implementation of a Knowledge Base Based on an Ontology for a Service Robot in a Kitchen Environment -- Combining TRIZ and LCA for a better awareness of the sustainability of a technical solution -- Eco-design Pilot Improvement Based on TRIZ and ASIT Tools -- Innovation Portfolio Management: How TRIZ can help -- Development of an Ontology of Sustainable Eco-friendly Technologies and Products Based on the Inventive Principles of the TRIZ Theory (OntoSustIP) -- Eco-Feasibility Study and Application of Natural Inventive Principles in Chemical Engineering Design -- Focusing the first phase - an interdisciplinary approach to modeling an interactive system on the Use-Case Indoor-Blind-Navigation -- Ideal Final Result for Agriculture: Striving for Sustainability -- Analysing the Role of Human Capital in Strengthening National Innovation System through University-Industry Research Collaboration: A Triz Based Approach -- Triz-based Remodelling of Body Enclosure for Corpse -- TRIZ education and ecosystem -- WTSP Report (5) Catalogs of TRIZ and Around-TRIZ Sites in the World: We Can Learn Full Scope of TRIZ-related Works in the World -- TRIZ Training Within a Continuous Improvement (Kai-zen) Event -- Exploration and Evaluation -- TRIZ Training in Pandemic Time.

This book constitutes the refereed proceedings of the 22nd International TRIZ Future Conference on Automated Invention for Smart Industries, TFC 2022, which took place in Warsaw, Poland, in September 2022; the event was sponsored by IFIP WG 5.4. The 39 full

papers presented were carefully reviewed and selected from 43 submissions. They are organized in the following thematic sections: New perspectives of TRIZ; AI in systematic innovation; systematic innovations supporting IT and AI; TRIZ applications; TRIZ education and ecosystem.
