Record Nr. UNINA9910483103703321 Autore Trujillo-Cabezas Raúl Titolo Integrating Soft Computing into Strategic Prospective Methods: Towards an Adaptive Learning Environment Supported by Futures Studies / / by Raúl Trujillo-Cabezas, José Luis Verdegay Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 3-030-25432-1 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XXII, 230 p.) Collana Studies in Fuzziness and Soft Computing, , 1434-9922; ; 387 Disciplina 006.3 Soggetti Computational intelligence Operations research Management science Artificial intelligence **Decision** making Computational Intelligence Operations Research, Management Science Artificial Intelligence Operations Research/Decision Theory Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Introduction -- Strategic Prospective: Definitions and Key Concepts --Nota di contenuto Fuzzy Optimization and Reasoning Approaches -- Constructing Models -- Modeling and Simulation of the Future -- Experimental Applications: An Overview of New Ways -- Meta-Prospective Toolbox -- A Cloud Environment: A first demo. This book discusses how to build optimization tools able to generate Sommario/riassunto better future studies. It aims at showing how these tools can be used to develop an adaptive learning environment that can be used for decision making in the presence of uncertainties. The book starts with existing fuzzy techniques and multicriteria decision making approaches and shows how to combine them in more effective tools to model future

events and take therefore better decisions. The first part of the book is

dedicated to the theories behind fuzzy optimization and fuzzy

cognitive map, while the second part presents new approaches developed by the authors with their practical application to trend impact analysis, scenario planning and strategic formulation. The book is aimed at two groups of readers, interested in linking the future studies with artificial intelligence. The first group includes social scientists seeking for improved methods for strategic prospective. The second group includes computer scientists and engineers seeking for new applications and current developments of Soft Computing methods for forecasting in social science, but not limited to this.