1. Record Nr. UNINA9910973534503321 Autore Gilboa Itzhak Titolo A theory of case-based decisions / / Itzhak Gilboa and David Schmeidler Pubbl/distr/stampa Cambridge: ,: Cambridge University Press, , 2001 **ISBN** 1-107-12302-X 0-511-11944-5 0-511-32513-4 1-280-16224-4 0-521-80234-2 0-511-04781-9 0-511-15330-9 0-511-49353-3 Edizione [1st ed.] Descrizione fisica 1 online resource (x, 199 pages): digital, PDF file(s) 658.4/033 Disciplina Soggetti Decision making - Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Prologue. 1. The scope of this book. 2. Meta-theoretical vocabulary. 3. Meta-theoretical prejudices -- 2. Decision rules. 4. Elementary formula and interpretations. 5. Variations and generalizations. 6. CBDT as a behaviorist theory. 7. Case-based prediction -- 3. Axiomatic derivation. 8. Highlights. 9. Model and result. 10. Discussion of the axioms, 11, Proofs -- 4, Conceptual foundations, 12, CBDT and expected utility theory. 13. CBDT and rule-based systems -- 5. Planning. 14. Representation and evaluation of plans. 15. Axiomatic derivation -- 6. Repeated choice. 16. Cumulative utility maximization. 17. The potential -- 7. Learning and induction. 18. Learning to maximize expected payoff. 19. Learning the similarity function. 20. Two views of induction: CBDT and simplicism. Sommario/riassunto Gilboa and Schmeidler provide a paradigm for modelling decision making under uncertainty. Unlike the classical theory of expected utility maximization, case-based decision theory does not assume that

decision makers know the possible 'states of the world' or the

outcomes, let alone the decision matrix attaching outcomes to actstate pairs. Case-based decision theory suggests that people make decisions by analogies to past cases: they tend to choose acts that performed well in the past in similar situations, and to avoid acts that performed poorly. It is an alternative to expected utility theory when both states of the world and probabilities are neither given in the problem nor can be easily constructed. The authors describe the general theory and its relationship to planning, repeated choice problems, inductive inference, and learning; they highlight its mathematical and philosophical foundations and compare it with expected utility theory as well as with rule-based systems.