1. Record Nr. UNINA9910137211403321

Autore	Marius Usher
Titolo	Dynamics of decision making [[electronic resource]] : from evidence to preference and belief / / topic editors Marius Usher, Konstantinos Tsetsos, Erica Yu and David A. Lagnado
Pubbl/distr/stampa	Frontiers Media SA, 2014 France : , : Frontiers Media SA, , 2014
ISBN	9782889192700 (ebook)
Descrizione fisica	1 online resource (259 pages) : illustrations, charts
Collana	Frontiers Research Topics, , 1664-8714
Soggetti	Management Theory Management Business & Economics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Sommario/riassunto	At the core of the many debates throughout cognitive science concerning how decisions are made are the processes governing the time course of preference formation and decision. From perceptual choices, such as whether the signal on a radar screen indicates an enemy missile or a spot on a CT scan indicates a tumor, to cognitive value-based decisions, such as selecting an agreeable flatmate or deciding the guilt of a defendant, significant and everyday decisions are dynamic over time. Phenomena such as decoy effects, preference reversals and order effects are still puzzling researchers. For example, in a legal context, jurors receive discrete pieces of evidence in sequence, and must integrate these pieces together to reach a singular verdict. From a standard Bayesian viewpoint the order in which people receive the evidence should not influence their final decision, and yet order effects seem a robust empirical phenomena in many decision contexts. Current research on how decisions unfold, especially in a dynamic environment, is advancing our theoretical understanding of decision making. This Research Topic aims to review and further explore the time course of a decision - from how prior beliefs are

formed to how those beliefs are used and updated over time, towards the formation of preferences and choices and post-decision processes and effects. Research literatures encompassing varied approaches to the time-scale of decisions will be brought into scope: a) Speeded decisions (and post-decision processes) that require the accumulation of noisy and possibly non-stationary perceptual evidence (e.g., randomly moving dots stimuli), within a few seconds, with or without temporal uncertainty. b) Temporally-extended, value-based decisions that integrate feedback values (e.g., gambling machines) and internally-generated decision criteria (e.g., when one switches attention, selectively, between the various aspects of several choice alternatives). c) Temporally extended, belief-based decisions that build on the integration of evidence, which interacts with the decision maker's belief system, towards the updating of the beliefs and the formation of judgments and preferences (as in the legal context). Research that emphasizes theoretical concerns (including optimality analysis) and mechanisms underlying the decision process, both neural and cognitive, is presented, as well as research that combines experimental and computational levels of analysis.