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Titolo	An Anthology of Theories and Models of Design : Philosophy, Approaches and Empirical Explorations // edited by Amaresh Chakrabarti, Lucienne T. M. Blessing
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Soggetti	Engineering design Philosophy Engineering Design Philosophy of Technology
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Theories and Models of Design: A Summary of Findings -- Design Theories, Models and Their Testing On the Scientific Status of Design Research -- A Structure for Design Theory -- Motive of Design: Roles of Pre- and Post-Design in Highly Advanced Products -- What the Design Theory of Social Cyberphysical Systems must Describe, Explain and Predict -- Models of Design -- Perceiving design as modelling: A cybernetic systems perspective -- The Contact and Channel Approach (C&C ² -A): Relating a System's Physical Structure to its Functionality -- Domain Theory, its Models and Concepts -- Engineering Design: Role of Theory, Models, and Methods -- 10 Years of C-K Theory: A Survey on the Academic and Industrial Impacts of a Design Theory -- Designing the Inventive Way in the Innovation Era -- The Function-Behaviour-Structure Ontology of Design -- The Aristotelian Proto-theory of Design -- Perspectives on Design Models and Theories and Development of an Extended – Integrated Model of Designing --

Modelling Products and Product Development Based on Characteristics and Properties -- A Theoretical Approach to Intuition in Design -- Re-Visiting Design as an Information Processing Activity -- Constraints and conditions: Drivers for Design Processes -- Theories, Models, Programs and Tools of Design: Views from Artificial Intelligence, Cognitive Science and Human-Centered Computing -- Modeling the Role of Sketching in Design Idea Generation.

Sommario/riassunto

While investigations into both theories and models has remained a major strand of engineering design research, current literature sorely lacks a reference book that provides a comprehensive and up-to-date anthology of theories and models, and their philosophical and empirical underpinnings; An Anthology of Theories and Models of Design fills this gap. The text collects the expert views of an international authorship, covering: · significant theories in engineering design, including CK theory, domain theory, and the theory of technical systems; · current models of design, from a function behavior structure model to an integrated model; · important empirical research findings from studies into design; and · philosophical underpinnings of design itself. For educators and researchers in engineering design, An Anthology of Theories and Models of Design gives access to in-depth coverage of theoretical and empirical developments in this area; for practitioners, the book will provide exposure to theoretical and empirical foundations to methods and tools that are currently practiced as well as those in the process of development.
